ANNUAL INSPECTION + MAINTENANCE + MONITORING REPORT FOR 2017

for the

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill Site

Jersey City, Hudson County, NJ
Block 11706, Lot 3; Block 11707, Lot 3
Program Interest (P.I.) Number: 576808
Former P.I. Number: 216727 (RPC000002)

Prepared For

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March 31, 2018

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VOLUME I OF II

Annual Site Inspection, Maintenance, and Monitoring for 2017

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APPENDICES

1.0 Introduction

This Annual Inspection + Maintenance + Monitoring report (I+M+M Report) was prepared by Sadat Associates, Inc. ("SAI") on behalf of Prologis, L.P. ("Prologis"), owner and developer of the Prologis Ports Jersey City Distribution Center, formerly known as the Pulaski Distribution Center located at Truck Route 1 and 9 South (opposite 400 Sip Avenue), Jersey City, Hudson County, New Jersey. This I+M+M Report is submitted in accordance with the approved Operations and Maintenance Plan for the closure of the Site and includes the inspection and monitoring findings for calendar year 2017 as well as accompanying photograph logs, forms, and data. This report is comprised of two volumes. Volume I includes the site inspection, maintenance, and monitoring, and Volume II includes the groundwater monitoring.

1.1 Description and Regulatory History

The entire site is a closed and capped landfill (former PJP Landfill) located at 400 Sip Avenue, Jersey City, Hudson County, New Jersey. The former PJP Landfill consists of approximately 87 acres and is bounded on the northwest by the Hackensack River, on the north by the Hartz Mountain Warehouse, on the northeast by a recycling facility and a warehouse, on the southeast by New Jersey Truck Route 1 and 9, and on the southwest by warehouses and trucking operations. The entire site is divided into three portions: 1) the Jersey City Recreational Portion which consists of 33.5 acres (for which the City of Jersey City is responsible; this portion is also known as Sky Park); 2) the Prologis portion which consists of approximately 49.15 acres (for which Prologis is responsible); and 3) the trucking facility which consists of the remaining 4 to 5 acres (for which JD Trucking is responsible). For the purposes of this report, the Prologis portion of the former PJP Landfill will be referred to as the Site.

The area which would later become the PJP Landfill was originally a salt marsh bordering the Hackensack River. In 1932, part of this area was used in the construction of the Pulaski Skyway. Although Remedial Investigations have shown that fill was being placed in this area since the 1940s, commercial landfill operations at the PJP Landfill did not begin until approximately 1968. These landfill operations included the acceptance of chemical and industrial wastes for disposal. The landfill ceased operation as a solid waste disposal facility in 1974 (Sadat, 2008). Sadat, 2008 refers to the "Amended Design Report for AMB-Pulaski Distribution Center (Archdiocese Property) on a Portion of the Former PJP Landfill," prepared by SAI and dated December 2007 (revised May 2008).

In July 1973, the New Jersey Department of Transportation ("NJDOT") uncovered drums containing chemicals under the Pulaski Skyway. From 1970 to 1985, subsurface fires in a 45-acre area (later capped and termed the "IRM area") were reported. These fires were attributed to combustion of buried wastes and decomposition of landfill materials. In December 1982, the PJP Landfill was placed on the United States Environmental Protection Agency's (USEPA) National Priorities List and designated for environmental restoration.

In 1985, the New Jersey Department of Environmental Protection (NJDEP) retained EBASCO Services, Inc., to design and implement an Interim Remedial Measure (IRM) to extinguish the fires and cap 45 acres of the landfill. The IRM was implemented by D'Annunzio Associates. There have been no reports of fires at the landfill since the completion of the IRM in May 1986 (Sadat, 2008).

In 1988, the NJDEP contracted ICF Technology, Inc. ("ICF") to conduct a comprehensive Remedial Investigation/Feasibility Study ("RI/FS") on the entire 87 acres of the former PJP Landfill. The RI and Risk Assessment were completed in 1990, and the FS was completed in 1993. Additional ground water and surface water investigations, including toxicity testing, were completed in 1993. Based on the results of the RI/FS, the Risk Assessment, and the 1993 monitoring event, the NJDEP selected a remedy as presented in the Record of Decision (ROD), issued September 28, 1995 (Sadat, 2008).

The ROD presents the selected remedial action for the PJP Landfill, which was chosen in accordance with the requirements of the Comprehensive Environmental Response, Compensation and Liability Act, as amended, and to the extent practicable, the National Oil and Hazardous Substance Pollution Contingency Plan. Various remedial alternatives with estimates of capital and Operations and Maintenance (O&M) costs, as well as implementation time were considered by the USEPA and the NJDEP and discussed in the ROD. Examples of remedial alternatives considered included no further action, soil cover, NJDEP modified solid waste cap, drum removal, etc. After reviewing the costs and benefits of the various alternatives and public comments, the USEPA selected a remedial action for the PJP Landfill. The selected remedy represents the first and only planned operable unit for the PJP Landfill. It addresses contaminated surface soils at the PJP Landfill and groundwater contamination in the underlying shallow and deep aquifers. The major components of the selected remedial remedy included:

- Removal of all known and suspected buried drums and associated visibly contaminated soil;
- Capping the remaining landfill area with a multilayer modified solid waste type cap;

- Extending the existing gravel lined ditch around the perimeter of the Site to collect the surface water runoff;
- A passive gas or active venting system installed in the new portion of the cap. However, if an active system is deemed necessary, both areas would be included;
- Site fencing and institutional controls (e.g., deed restrictions and public information program);
- Periodic inspections of the cover installed during the Interim Remedial Measure to be performed before and during the implementation of the remedial action. If the cover is found to be damaged or degraded, then at least one additional foot of topsoil should be spread over the previously installed cover;
- Replacing the Sip Avenue Ditch with an alternative form of drainage;
- Quarterly groundwater and surface water monitoring to evaluate the reduction of contaminant concentrations over time. If a significant adverse impact is found, the NJDEP and USEPA would evaluate remedial alternatives and select an appropriate remedy in accordance with CERCLA and NCP;
- Modeling to demonstrate the effectiveness of the cap by predicting the impact of ground water leachate migrating to the Hackensack River from the landfill;
- Establish a CEA/WRA because contamination levels in the groundwater are above Class IIA CWQC; and
- Implementation of a wetlands assessment and restoration plan. The wetlands assessment had to be performed before initiation of any of the remedial actions.

The ROD states that implementation of the selected alternative would reduce leaching of contaminants into groundwater, provide protection of human health by preventing direct contact with contaminated materials, and would enable the NJDEP and USEPA to reevaluate the Site conditions and determine the effectiveness of the remedy selected. The ROD concludes, "The selected remedy is protective of human health and the environment, complies with Federal and State requirements that are legally applicable or relevant and appropriate to the remedial action, and is cost-effective."

Because the selected remedy in the ROD would result in hazardous substances remaining at the PJP Landfill above health-based levels (soil would be capped over), a review would be conducted within five years after commencement of the remedial action to ensure that the remedy would continue to provide adequate protection of human health and the environment.

Waste Management of NJ and CWM Chemical Services, together known as CCS, assumed responsibility for the closure of the PJP Landfill. CCS entered into an Administrative Consent Order ("ACO") in 1997 and an amended ACO, effective June 27, 2000, with the NJDEP for the implementation of the selected remedy as described in the ROD. CCS submitted a series of design reports in 2001 and 2002 to the NJDEP for review. A Final Design Report prepared by Golder was submitted to the NJDEP on April 4, 2007. The Final Design Report was approved by the NJDEP on July 26, 2007. CCS performed quarterly ground water and surface water monitoring at the former PJP Landfill from October 2001 to 2012.

Prologis purchased the Site from the Archdiocese of Newark in 2008. At the time of the transaction, the purchasing entity was AMB Pulaski Distribution Center, LLC, a Prologis owned entity. On March 7, 2008, an ACO ("May 2008 ACO") was executed with the NJDEP, assigning the responsibility of closure of this purchased property to Prologis. CCS retained the responsibility for the closure of the remaining properties of the former PJP Landfill. CCS completed its remediation work on the Jersey City portion of the former landfill in 2012.

Prologis submitted a Remedial Equivalency Evaluation to the NJDEP in support of an alternative design for the Site closure to facilitate the construction of its warehouse building (*Remedial Equivalency Evaluation for PJP Landfill Site 400 Sip Avenue Archdiocese Portion*, prepared by SAI and dated August 2007). Prologis demonstrated that the proposed cap cover design associated with the planned development was protective of human health and the environment, and equivalent to the cap cover proposed by CCS in the Final Design Report. Pursuant to the May 2008 ACO, an Amended Design Report (Sadat, 2008) for the Site was submitted by Prologis to the NJDEP in December 2007 with a revised submission in May 2008. The NJDEP approved the Amended Design Report in July 2008.

A Vapor Intrusion (V.I.) Assessment was performed by SAI in accordance with the NJDEP 2005 Vapor Intrusion Guidelines, and findings were submitted in a report, entitled *Vapor Intrusion Assessment Report for the AMB Pulaski Distribution Center*, prepared by SAI and dated September 2008, to both the NJDEP and the USEPA. The Vapor Intrusion Assessment was performed using site specific information, including groundwater and landfill soil gas data collected at the Site.

The V.I. assessment indicated that given the low measured concentrations of volatile organic compounds (VOCs) in groundwater and landfill soil gas in combination with the three-level vapor intrusion protection system (gas venting, geomembrane liner, and gas detection system inside the building), the potential risk for vapor intrusion into the proposed warehouse building would be minimal. This was further supported by a detailed risk assessment that was performed by Golder Associates in 2001 as part of the Remedial Investigation of the former PJP Landfill. This risk assessment concluded that “the risk presented by those emissions (soil gas) to various potential on-site and off-site receptors was within the range considered acceptable by the National Contingency Plan.”

Because the warehouse Site would be located on fill material and given the relatively low concentrations of VOCs measured in groundwater, landfill gas (e.g., methane) generated within the fill material was considered to represent the highest potential threat for vapor intrusion. Readings collected from the existing passive landfill gas vents such as methane, carbon dioxide, non-methane organic compounds, and hydrogen sulfide were used to design the gas venting and gas collection systems at the Site.

Prologis began construction work according to the approved Amended Design Report in 2008; project completion was achieved in August 2014.

1.2 Site Location

According to the United States Geologic Survey for the Jersey City Quadrangle, the center of the Site is located approximately at 40^{o} 44' 2.9" north latitude and 74^{o} 5' 12.3" west longitude (State Plane Coordinates: 607,416 East; 692,746 North). The Site is designated on the City of Jersey City tax map as Block 11707, Lot 3 and Block 11706, Lot 3 and consists of approximately 49.15 acres. The Site location is shown on Figure 1 (Appendix A). The former PJP Landfill is identified by EPA ID# NJD980505648. In 2016, the NJDEP assigned 576808 as the Program Interest (P.I.) number to the Site (the former P.I. Number for the Site was 216727; RPC #000002).

The Site is located within an urban area of Jersey City. It is bounded on the northwest by the Hackensack River. The Sip Avenue drainage ditch transects east-west just north of the Site, where it connects into the Hackensack River. The Site is bounded on the northeast by the Jersey City portion of the former PJP Landfill, on the southeast by Truck Route 1 and 9 South, and on the southwest by warehouses and trucking operations. The former RV Salvage, Truck Stop, and junkyard properties were previously located on the Jersey City portion of the former landfill.

1.3 Submission of Final Remediation Documents

Prologis has completed construction of an 876,823 square feet (sq. ft.) distribution center at the Site. A pre-final inspection of the Site was performed by representatives of the NJDEP, USEPA and SAI on October 28, 2014. Both the NJDEP and USEPA determined at that time that there was no need for further remedial actions and a final site inspection was not necessary.

The final remediation document, the *Remedial Action Completion Report for the Prologis Ports Jersey City Distribution Center, Part of the Former PJP Landfill Site* ("RACR"), which summarizes the remedial activities and engineering controls installed at the Site, was submitted by SAI on behalf of Prologis to the NJDEP on January 15, 2015. This report included the draft Deed Notice for the Site. A revised *Classification Exception Area/Well Restriction Area (CEA/WRA) Fact Sheet Form* was submitted by SAI to the NJDEP on January 22, 2015. Prologis received NJDEP and USEPA comments on the RACR via correspondence dated July 8, 2015. The NJDEP also provided comments on the CEA/WRA via correspondence dated July 14, 2015. Prologis submitted its response to comments from the Department and USEPA on October 13, 2015. Via correspondence dated October 22, 2015, the NJDEP approved the response to the comments. The revised RACR and CEA/WRA Fact Sheet were submitted to the NJDEP and USEPA on December 3 and December 6, 2015, respectively. The Deed Notice for the Site was recorded by Hudson County on June 21, 2016. The Deed Notice for the NJDOT property located below the Pulaski Skyway which intersects the Site was recorded on December 21, 2017.

1.4 Remedial Systems

The following primary remedial systems have been completed at the Site and are currently being monitored and inspected:

- Final cover;
- Storm water management;
- Hackensack Riverbank erosion protection;
- Ground water monitoring network;
- Under slab gas venting;
- Gas collection;
- Above slab methane sensor detection; and
- Site security.

2.0 Field Inspections

An SAI representative performed field inspections of the following systems on June 13, 2017, and November 29, 2017.

- Final cover;
- Hackensack Riverbank erosion protection;
- Storm water management;
- Ground water monitoring wells; and
- Site security.

Overall, the findings from SAI's field inspections indicate that the field system components were intact and in good condition. Details of the field inspections can be found in Appendix C, which contains Inspection Forms, along with a Photographic Area Map and Photograph Logs, which include detailed summaries of SAI's findings.

2.1 Final Cover System

2.1.1 System Description

The redevelopment cap system is a multilayer cap that consists of the following components from top to bottom at each redevelopment area.

- Building Area: the cap system for the building area consists of concrete slab placed on top of structural fill (densely graded aggregate base), followed by a vapor barrier with non-woven geotextile on both sides, aggregate (gas venting layer), another geotextile layer, structural fill material and sub-grade or grading fill.
- Outside Concrete Areas: the cap system for the concrete areas consists of sidewalks, curbs, docking areas, dolly pads and dolly strips made from an enhanced concrete, followed by a drainage layer consisting of densely graded aggregate, recycled concrete aggregate of varying thickness, and the sub-grade or grading fill.
- Paved Areas: the cap system for the paved areas consists of a low permeability layer consisting of base course with a tack coat, binder course with a tack coat, surface course, followed by a drainage layer consisting of recycled concrete aggregate of varying thickness, and the sub-grade or grading fill.
- Green Areas: the cap system for the green areas consists of either topsoil or clean river stone, followed by compacted common fill, geotextile, and geomembrane.
- Chromate Impacted Areas within the Green Areas: the cap system for the green areas impacted with chromate consists of topsoil, compacted common fill, a geotextile layer, a geomembrane liner and a cushion layer, and the sub-grade or grading fill.

2.1.2 Inspection Items

The inspections involved a site walkthrough to search for any noticeable occurrences that could potentially impact the effectiveness of the final cover systems. Special emphasis was placed on the following:

- *Integrity of Building Area Final Cover System*

  The building area final cover system was inspected for cracks and fractures in the slab, especially near columns, walls and other structural components where differential settlement is most likely to be noticeable. Any other damage to the building area final cover system was noted as well.

- *Integrity of Paved and Outside Concrete Areas Final Cover System*

  The asphalt and concrete paved areas final cover system was inspected for cracks and fractures, especially near curbs, light posts and other structures where differential settlement is most likely to be noticeable. In addition, curbs were inspected for any damage caused by road traffic and/or snow removal activities. Any other damage to the paved areas final cover system was noted as well.

- *Green Areas Final Cover System*

  The vegetative cover was inspected for density, type, and damage caused by animals, personnel, equipment, erosion, seepage, or gas migration. Areas with vegetative cover insufficient to prevent erosion, such as having less than 85 percent coverage or having bare patches larger than one square yard, was noted. The vegetative cover was also inspected for erosion, such as gullies, particularly on slopes and other places where erosion is most likely to take place. The final cover was inspected for breaks in the soil due to animal burrows and/or differential settlements. Any other damage to the green areas final cover system was noted as well.

2.1.3 Inspection Findings

SAI inspected and documented the condition of the final cover of the Building Area, Paved and Outside Concrete Areas, and Green Areas. The results of the inspection are as follows:

- *Integrity of Building Area Final Cover System*

  The Building Area final cover system was found to be in good condition.

- *Integrity of Paved and Outside Concrete Areas Final Cover System*

  The Paved and Outside Concrete Areas final cover system was found to be in good condition with only minor surficial cracking. The largest minor surficial crack in the paved areas was noted to be no more than 100 feet in length. Only minor surficial cracking was found in the concrete sidewalk, with the largest minor surficial crack being no longer than five feet. Both types of surficial cracks do not indicate a compromise of the integrity of the cap in those areas, and therefore no action is needed at this time.

- *Green Areas Final Cover System*

  The Green Areas final cover system was found to be in good condition. Areas of vegetative distress are limited at the Site. The vegetative distress is due to a combination of windy conditions and open areas leading to erosion of certain green area surfaces. During the first 2017 semiannual inspection, seven isolated areas of vegetative distress were noted, each no more than 50 square feet. Reseeding took place in the fourth quarter of 2017 to repair the distressed areas. Green Area cover repairs will continue as needed throughout the Site.

Information gathered during the inspections of the final cover systems was documented photographically and on a field inspection form (see Appendix C). Any minor cracking found at the Site is due to everyday wear and tear (i.e., weight/pressure or freeze-thaw weathering). The final cover systems will continue to be inspected on a semiannual basis to assess damages from the freeze-thaw cycle and potential erosion from storm water runoff.

2.1.4 Maintenance

In order to ensure the continued effectiveness of the final cover systems, mowing of the green areas and debris removal are currently being performed on an as needed basis. In addition, inspections may reveal the need for repair maintenance to ensure the continued effectiveness of the final cover systems. These may include reseeding of the green areas, regrading of eroded areas, animal burrow filling, riprap replacement, and repair of cracks and fractures in paved and concrete areas.

On May 15 and 16, 2017, the Contractor (Spatz) for Prologis installed new fence posts for access gates in the South Parking lot and Northwest Truck lot. Prior to the installation of the new fence posts, the existing posts were removed. This involved removing the concrete footings that supported the old fence posts and backfilling them with the same material used to cap the Site in that location. To install the new fence posts, holes penetrating the cap were drilled into the fill material below the cap. The new fence post holes were filled with the approved enhanced concrete mixture used to cap the Site to create the footing for the fence posts. The excavated material was sampled, characterized, and disposed of according to the NJDEP waste classification protocols. The material excavated in May 2017 was disposed along with similar material from other previous fence post installations (total of approximately 3 cubic yards). Laboratory data characterizing the material, along with signed generator forms and disposal documents, are included in Appendix D.

Also on May 15 and 16, 2017, approximately 40 speed limit sign posts were installed at the Site. Holes were drilled for installation of these sign posts. Each small section of the disturbed cap around the sign post was completely sealed. The holes were backfilled to return the cover to its original condition at all locations.

On December 11, 2017, Spatz performed repair activities to upright a leaning light pole which had been damaged at the entrance of the North Truck lot. Spatz also repaired the geomembrane liner, the area around the light pole, and backfilled the area to return the cover to its initial condition.

2.2 Hackensack Riverbank

2.2.1 Inspection Items

The inspection involved a Site walk along the riverbank and/or access roadways to inspect the Hackensack River bank along the Site. The riverbank is inspected for structural integrity. Erosion or potential areas of erosion, animal burrows, differential settlement, vandalism, or signs of instability of any areas that would result in erosion are identified and evaluated.

2.2.2 Inspection Findings

SAI inspected and documented the condition of the riverbank erosion protection system and found it to be intact and in good condition. Information gathered during the inspections was documented photographically and on a field inspection form (see Appendix C). The riverbank will continue to be inspected on a semiannual basis to assess damages from the freeze-thaw cycle and storm water runoff. Additional inspections may be performed after significant storms equal to or greater than the magnitude of a 100-year storm event.

2.2.3 Maintenance

Scheduled maintenance of the Hackensack River bank erosion control system will be conducted on a regular basis. Routine maintenance items that could impact the effectiveness of the riverbank erosion protection system include animal burrows, cracks/fractures, undermining of riverbank stabilization due to water, scouring, vegetation and/or riprap loss, and side slope structural integrity.

2.3 Storm Water Management System

2.3.1 System Description

The storm water management system provides for the collection and discharge of all onsite runoff. The storm water management system utilizes reinforced concrete pipes and a swale to convey runoff collected by the inlets to three underground detention basins. Each of the three underground detention basins is routed through a series of water treatment chambers, which help meet the required water quality of the collected runoff prior to discharge.

The three underground detention basins and associated water quality treatment devices were constructed to achieve the Land Use Flood Hazard Area/ Waterfront/ Freshwater Wetland (FHA/WD/FWW) permit requirement of 80 percent of the total suspended solids (TSS) removal. A New Jersey Pollutant Discharge Elimination System permit was obtained for construction of this system. There are no post closure water quality sampling requirements for the system.

2.3.2 Inspection Items

The inspection involves a site walkthrough to search for any noticeable occurrences that may potentially impact the effectiveness of the storm water management system. These include the following:

- Erosion;
- Animal burrows;
- Cracks or fractures as a result of differential settlement;
- Excessive accumulation of leaves, silt and sediment;
- Damage to culverts and inlets;
- Unauthorized obstruction, damage or disturbances by personnel and/or equipment; and
- Intrusion of vegetative growth.

The storm water system is inspected for obstructions caused by accumulated leaves, grass clippings, silt and sediment deposits, or excessive vegetative growth, which may obstruct or alter storm water flow. Other damage from vandalism or disturbances by unauthorized obstructions, damage or personnel could also reduce the effectiveness of the storm water drainage system.

2.3.3 Inspection Findings

SAI inspected and documented the condition of the storm water management system and found it to be intact and in good condition. One broken cover for a catch basin on the North Perimeter Road near the Site exit was found during the inspections. Repair of the catch basin cover is being scheduled. The June

2017 inspection found that the grass covered slope of the southern swale required seeding to repair erosion. The November 2017 inspection confirmed that seeding and green area cover repairs within the swale had occurred. Information gathered during the inspections of the system was documented photographically and on a field inspection form (see Appendix C). The storm water management system will continue to be inspected on a semiannual basis to assess damages from the freeze-thaw cycle and storm events.

2.3.4 Maintenance

In order to ensure the continued effectiveness of the storm water management system, the removal of leaves, grass clippings, silt and sediment deposits, and excessive vegetative growth is performed during regular maintenance of other systems, or more frequently as necessary. In addition, regrading, riprap replacement, erosion/settlement repair, animal burrow filling, and jet cleaning of the piping system may be required to ensure the continued effectiveness of the storm water management system.

2.4 Ground Water Monitoring Wells

2.4.1 System Description

A total of eight monitoring wells exist at the Site and are used to monitor the ground water quality (see Appendix A for well locations). A ground water monitoring program (described in the CEA) evaluates the reduction of contaminant concentrations over time following completion of the closure and redevelopment measures. See Volume II of this report (Annual Groundwater Monitoring for 2017) for further discussion of the monitoring wells.

2.4.2 Inspection Items

Periodic inspection of the ground water monitoring wells is necessary to document and ensure their continual effectiveness as valid monitoring points. Several items may potentially impact the condition and, therefore, the effectiveness of the ground water monitoring wells. These include the following:

1. Erosion;
2. Damage to the protective casing and/or lock;
3. Damage to inner casing;
4. Cracks or fractures of inner/outer casing and concrete pad as a result of differential settlement;
5. Unauthorized obstruction, damage or disturbance by personnel, vandalism and/or equipment; and
6. Intrusion of vegetative growth.

2.4.3 Inspection Findings

The inspection involved visual assessment of each ground water monitoring well to search for any noticeable occurrences that could potentially impact the effectiveness of the ground water monitoring program. The ground water monitoring wells were inspected for physical damage and accessibility. The inner casing area was checked for debris and animals. In addition, the inner casing was inspected for obstruction at depth during routine well sampling. The area surrounding the ground water monitoring wells was examined for ponding and accessibility. Information gathered during the inspections of the ground water monitoring wells was documented photographically and on a field inspection form (see Appendix C). The groundwater monitoring wells were found intact. However, in August of 2017, a further investigation using a camera within the inner casings of the wells revealed that MW-4S had a blockage within the well and MW-5SR was bent. Repair of the wells is being scheduled for 2018. The ground water monitoring wells will continue to be inspected on a semiannual basis to assess any potential damage. See Volume II of this report for the Annual Groundwater Monitoring for 2017 for further discussion of the condition of the wells.

2.4.4 Maintenance

In order to ensure the continued effectiveness of the ground water monitoring program, maintenance of the ground water monitoring wells (outer casing, concrete pad, mowing/clearing, and security) are performed regularly or on an as needed basis.

2.5 Site Security System

2.5.1 System Description

On site security personnel are present to prevent unauthorized entrance to the Site.

2.5.2 Inspection Findings

During SAI’s field inspection, the presence of security personnel at the Site was confirmed.

3.0 Gas Venting and Collection Systems Inspections

An SAI representative performed field inspections of the following systems on June 13, 2017, and November 29, 2017.

- Under Slab Gas Venting System;
- Gas Collection system; and
- Above Slab Gas Detection System.

Overall, the findings from SAI's field inspections indicate that the gas venting and collection system components were intact and in good condition.

3.1 Under Slab Gas Venting System

3.1.1 System Description

The gas venting system consists of the following:

- Air intake and exhaust pipe networks embedded in a one-foot thick clean crushed stone ventilation layer.
- Under slab exhaust pipes connected to vertical exhaust stacks which are extended to the building's roof.
- An explosion proof exhaust fan connected to each exhaust stack. The blowers are designed to operate on a selected daily schedule. In addition, the blowers are equipped with flow timers, which allow for cycle operation and adjustment. Two blowers have been installed on both sides of the partitioned facility, for a total of four blowers. Only one blower is required to be operational on either side of the building; the additional blower serves as a source of backup exhaust. Three of the four blowers currently operate 16 hours per day, from 4:00 p.m. to 8:00 a.m. One of the four blowers, closest to Truck Route 1 and 9 South, currently operates for 12 hours per day, from 7:00 p.m. to 7:00 a.m. The under slab air intake pipe system is connected to vertical air intake stacks which are extended to the building's roof. The air intake stacks are connected to goose neck screened air inlets.
- A gas barrier consisting of a geosynthetic composite that covers the entire building foundation.
- Under slab sampling probes embedded in a one-foot thick clean crushed stone ventilation base course. The probes are connected by 3/8 inch poly tubing to a sampling port located on the exterior wall outside of the building. The poly tubing is protected by a ¾ inch PVC conduit.

3.1.2 Inspection Items

The inspection of the gas venting system involves visual observation of the external integrity of the gas venting system and related appurtenances such as valves, pressure gauges, and sampling ports. Any evidence of obstruction, such as debris or nesting of animals within the gas venting system and related appurtenances, which may also prevent optimal gas flow, is noted.

3.1.3 Inspection Findings

SAI's field inspection indicated that the under slab gas sampling stations were intact and operating properly. It was discovered that sampling port WSP-9 has a detached tubing connection. However, there are sufficient sampling ports throughout the building to collect data related to the performance of the under slab gas venting system. Therefore, WSP-9 will not be used for further sampling. All blowers, air intake risers, and air intake inlets were in good condition. As per the original engineering design, at least one blower was operational on each side of the partitioned facility during the operating hours of 4:00 p.m. to 8:00 a.m. In addition, all exhaust risers and sampling points were intact and performing properly. Information gathered during the inspections of the gas venting system was documented photographically and on a field inspection form (see Appendix C). Inspection of the gas venting system will continue to be conducted on a semiannual basis.

3.1.4 Maintenance

In order to ensure the continued effectiveness of the gas venting system, maintenance of the gas venting system is performed regularly or on an as needed basis. Repair maintenance tasks that may be necessary to maintain the effectiveness of the under slab gas venting system include repair/maintenance of the intake/exhaust risers, slab caulking, air vent openings, exhaust fans and piping system. Repair and replacement of system components (access ports, flex hoses, valves, road crossing, condensate traps, sumps, etc.) are conducted as needed. All portable equipment at the facility, such as explosimeters, is calibrated and maintained in proper functioning order. No major maintenance activities were conducted in 2017.

3.2 Gas Collection System

3.2.1 System Description

The gas collection system consists of several horizontal gas collection laterals connected to a distribution loop line linked to a mechanical blower. This system creates a negative pressure withdrawal system below the paved and grass area, and prevents gas from moving through the cap system. The gas collection system is programmed to operate on a continuous basis.

3.2.2 Inspection Items

The inspection of the gas collection system involves visual observation of the external integrity of the gas collection system and related appurtenances. Physical damage to the gas collection pipes such as kinks or bends, which may prevent optimal gas flow, are noted.

3.2.3 Inspection Findings

SAI’s field inspection indicated that the external blower and sampling points were intact and performing properly. A power failure in July of 2017 caused the external blower to cease operating. Power was restored to the blower in early August. Information gathered during the inspections of the gas collection system was documented photographically and on a field inspection form (see Appendix C). Inspection of the gas collection system will continue to be conducted on a semiannual basis.

3.2.4 Maintenance

In order to ensure the continued effectiveness of the gas collection system, maintenance of the gas collection system is performed regularly or on an as needed basis. Repair maintenance tasks that may be necessary to maintain the effectiveness of the gas collection system include pipe repair, system component replacement (access ports, flex hoses, valves, road crossing, condensate traps, sumps, etc.), re-installation of lost, damaged or ineffective sampling ports, debris removal, blower service, and electrical service.

3.3 Above Slab Gas Detection System

3.3.1 System Description

The gas detection system consists of 30 ceiling level sensors, 10 roof level sensors (at roof high points), and four sub slab methane sensors. The gas detection system is designed to automatically collect and analyze air samples throughout the interior of the building. The methane data collected from each sampling station is analyzed at the sensor located in either one of two control panels inside the building. Currently, any system faults, warnings, or alarms are recorded electronically.

3.3.2 Inspection Items

The inspection of the gas detection system involves visual observation of the external integrity of the gas detection system and related appurtenances such as sample tubing and methane detector alarms within the building(s). Any evidence of obstruction resulting from debris or nesting of animals within the gas detection system and related appurtenances, which may also prevent optimal sample gas flow, is also noted.

3.3.3 Inspection Findings

SAI’s field inspection indicated that the multipoint above slab sensor system is intact and operating properly. The control panel monitoring the operation of the methane detectors was intact. Information gathered during the inspections of the gas detection system was documented photographically and on a field inspection form (see Appendix C). The inspection of the gas detection system will continue to be completed on a semiannual basis. According to the approved NJDEP air permit, this electronic data is downloaded weekly and stored for recordkeeping purposes. A summary (methane readings exceeding 20% LEL, if any) of the gas/air testing data from the gas detection system is included in Appendix B. No methane exceedances occurred in 2017.

3.3.4 Maintenance

In order to ensure the continued effectiveness of the gas detection system, maintenance of the gas detection system is performed regularly or on an as needed basis. Repair maintenance tasks that may be necessary to maintain the effectiveness of the gas detection system may include sensor and system calibration, debris removal, and sensor tubing replacement. All portable equipment at the facility, such as explosimeters, is calibrated and maintained in proper functioning order.

4.0 Air Monitoring

4.1 Under Slab Gas

4.1.1 Sampling Plan

The under slab gas venting system is designed to permit sampling of the air quality within the under slab area. Sampling stations along the outside wall of the building allow for the gathering of instantaneous under slab air samples (using methane gas meters or explosimeters). The building is equipped with 15 under slab sampling points to permit drawing air samples from beneath the slab as well as 20 riser sampling ports (including the exhaust blower risers).

4.1.2 Sampling Results

SAI performed under slab gas sampling on June 13, 2017, and November 29, 2017. A Landtec GEM-2000 Gas Meter was used to determine the percent LEL (Lower Explosive Limit) of methane gas at each under slab sampling station. The instantaneous methane results are presented in Appendix B. Instantaneous readings are collected from these sampling ports semiannually. In 2017, the majority of instantaneous methane readings collected from the under slab, air intake risers, and exhaust risers indicated 0% LEL. The maximum methane level detected during 2017 (12% LEL) was found at location WSP-2. The level of methane at this sampling location has decreased since 2016. Overall, the levels of methane have decreased since the commencement of system operation. Methane generation is expected to decrease even further as the waste degradation decreases with time.

4.2 Air Emissions

According to the NJDEP Certificate to Operate Air Pollution Control Equipment Permit (PCP 080001), methane must be sampled and analyzed (by a New Jersey certified laboratory) following the initiation of the gas venting systems operation. This must be performed twice in the first quarter, once per quarter for the next three quarters, and semiannually thereafter. Hazardous Air Pollutants (HAPs) and Volatile Organic Compounds (VOCs) were only required to be monitored at the initiation of the operation of the underslab gas venting and gas collection systems. The gas samples are collected from the four rooftop blowers as well as the external blower located outside of the building area. The results of the gas sampling are submitted to the NJDEP Air Compliance and Enforcement within 60 days of each sampling event. In addition, flow rates from the five blowers at the Site are recorded on a monthly basis. Landfill gas concentrations must be less than the Lower Explosive Limit at all times, as recorded at a minimum of two locations inside the warehouse.

4.2.1 Sampling Plan

Sampling ports on the exhaust stacks are located just before the blower fan so that canister samples can be taken. Sampling at the blower stations is a manual procedure which is performed in accordance with the approved NJDEP air permit. Air samples are taken at the four blowers on the building roof and at the external blower on the western side of the property. Summa canisters are used to collect samples which are tested by a certified NJDEP Laboratory.

4.2.2 Sampling Results

Environmental Laboratories, Inc. (ELI), a New Jersey certified laboratory, collected air emission samples on May 26, 2017, and December 19, 2017. The samples were analyzed for methane gas. In compliance with the Certificate to Operate Air Pollution Control Equipment Permit, the sample analysis results for exhausts at the Site were submitted to the NJDEP within 60 days of each sampling event. Appendix D includes the NJDEP air emission submittals. Based on the May 2017 and December 2017 gas emission analytical results, the calculated average methane emissions for 2017 was 52.34 tons, which was below the NJDEP air permit limit of 59.55 tons per year. Detailed calculations are included in Appendix D along with a map of the sampling locations at the Site.

4.3 Flow Measurements

Sampling ports on the exhaust stacks are located just before the blower fan in order to measure flow. As per the approved air permit, flow rates were measured monthly from the four rooftop blowers (under slab gas venting system) and the external blower (gas collection system). See Appendix B for a summary of monthly flow measurements from each of the five blowers.

4.4 Surface Gas Monitoring

On August 2, 2017, SAI conducted surface gas monitoring for methane at the Site. The results of the surface gas monitoring throughout the Site were non-detect.

5.0 Ground Water Monitoring

5.1 Sampling Plan

As per the approved Ground Water Classification Exception Area/Well Restriction Area program, ground water samples are collected from five shallow ground water monitoring wells at the Site to monitor ground water quality changes following the implementation of the redevelopment and Remedial Action at the Site. The five ground water monitoring wells are MW-1SR, MW-4S, MW-5SR, MW-8SR2, and MW-9SR. In addition, ground water samples are collected from three deep ground water monitoring wells at the Site to monitor ground water quality changes following the implementation of the redevelopment and Remedial Action. The three deep ground water monitoring wells are MW-1DR, MW-4D and MW-8DR3. The locations of these wells are shown in Appendix A.

Volume II of this report includes a detailed discussion of the groundwater monitoring and sampling in 2017.

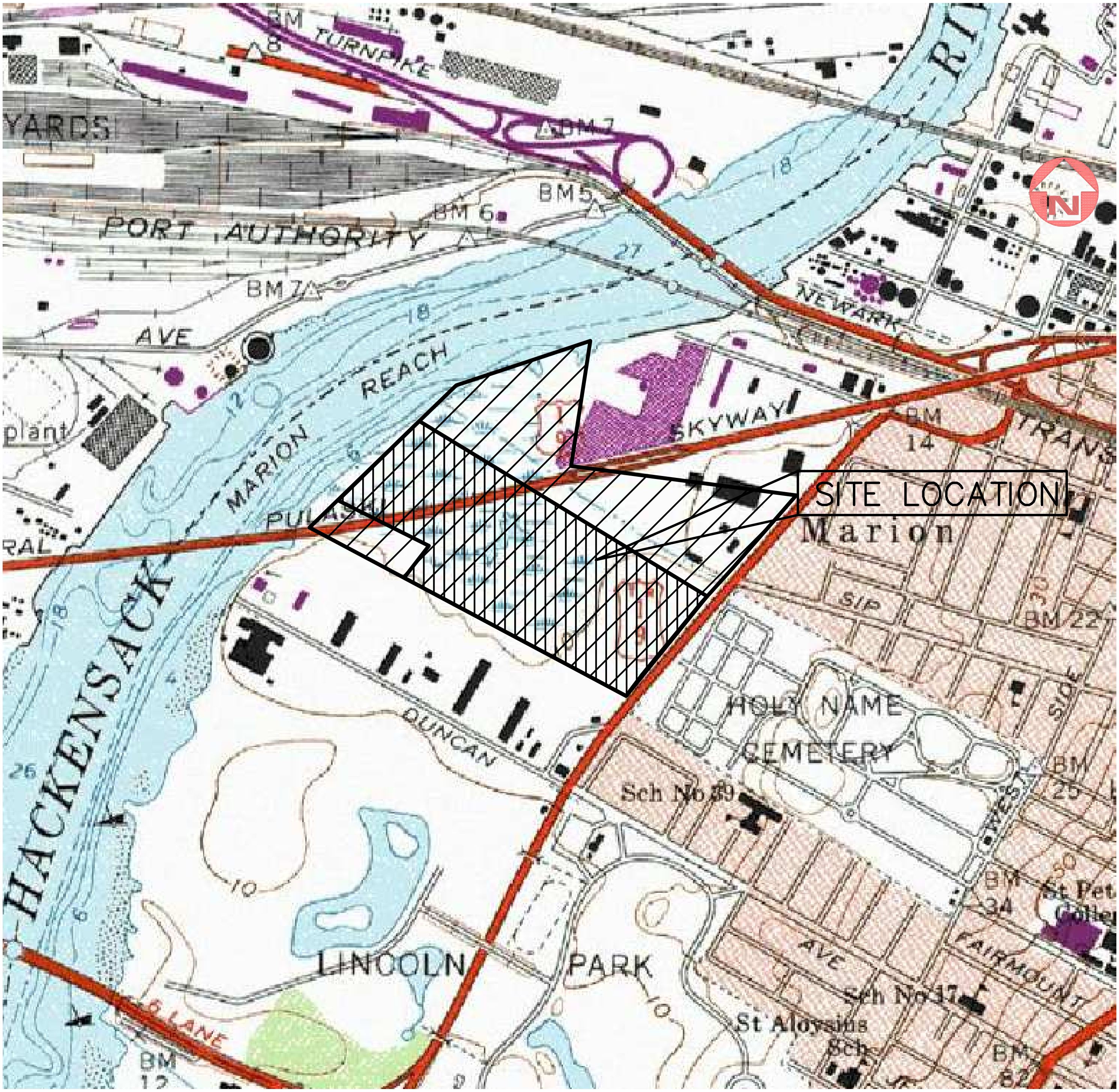
5.2 Water Level Measurements

The depth to ground water was measured in the ground water monitoring wells at the Site. The water levels of the ground water monitoring wells were measured (if possible) within a two hour period during the same day, and prior to any purging or sampling.

Volume II of this report includes a detailed discussion of the ground water level measurements taken in 2017.

APPENDIX A

Figures

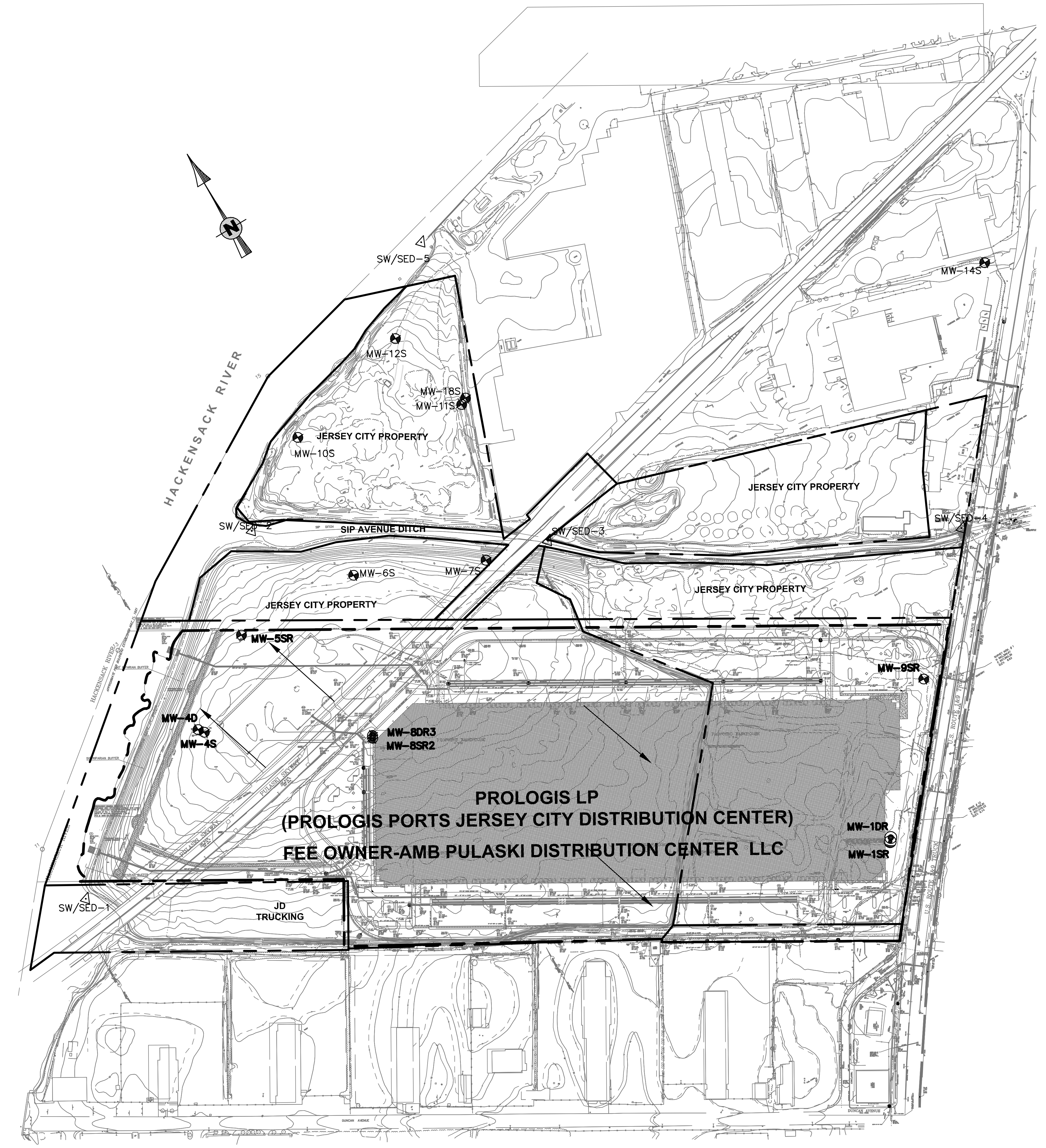


NOTE:
SOURCE: U. S. GEOLOGICAL SURVEY. JERSEY CITY QUADRANGLE.
7.5 MINUTE QUADRANGLE
USGS MAP PROVIDED BY MAPTECH: TERRAIN NAVIGATOR
655 PORTSMOUTH AVENUE, GREENLAND, NH 03840

Figure 1

SADAT ASSOCIATES INC.
ENGINEERING & ENVIRONMENTAL SCIENCE
1545 LAMBERTON ROAD, TRENTON NJ 08611.
(609) 826-9600 FAX (609) 826-9601

OWNER: PROLOGIS INC,. (PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER) EAST RUTHERFORD, NJ	DESIGN BY: JG	CHECKED BY:	CERTIFICATE OF AUTHORIZATION NO. 24GA28015200
	PROJ MGR: LC	STATUS: (D) DRAFT (P) PRELIM (F) FINAL (C) CONSTRUCTION	
	DRAWN BY: JG	DRAWING TITLE: PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER SITE LOCATION MAP	
	DATE: 06/24/2014		
	SCALE: 1"=2000'		
AUTOCAD PATH: DWG PATH & NAME	JOB NO: 06053-0101	DRAWING NO.: USG-01	SHEET 1 OF 2 — REV. 00



LEGEND

MW-4S EXISTING MONITORING WELLS

SW/SED-1 SURFACE WATER/SEDIMENT MONITORING LOCATION

CEA BOUNDARY (AOC – PORTION OF FORMER PJP LANDFILL SITEWIDE)

GROUNDWATER FLOW DIRECTION

NOTES:
GREATEST WIDTH OF GROUNDWATER CONTAMINATION IS 40 FEET

300 150 0 300 600

1"=300'

NOT FOR CONSTRUCTION

Figure 2

REV. NO.	DATE	REMARKS

Lahbib Chibani, Ph.D., P.E.
Professional Engineering License No. 37055

SADAT ASSOCIATES INC.
ENGINEERING & ENVIRONMENTAL SCIENCE
1545 LAMBERTON ROAD, TRENTON NJ 08611.
(609) 826-9600 FAX (609) 826-9601

OWNER
PROLOGIS LP.
(PROLOGIS PORTS JERSEY CITY
DISTRIBUTION CENTER)
EAST RUTHERFORD, NJ

AUTOCAD PATH
G:\PJP landfill\2014\Monitoring Well\

DESIGN BY: DZ
PROJ MGR: LC
DRAWN BY: JG
DATE: 09/25/2015
SCALE: 1"=300'
JOB NO: 06053-000

CHECKED BY

CERTIFICATE OF AUTHORIZATION
NO. 24GA28015200

STATUS
D DRAFT P PRELIM F FINAL C CONSTRUCTION

DRAWING TITLE
PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER
MONITORING WELL LOCATIONS

DRAWING NO. | SHEET OF | REV.

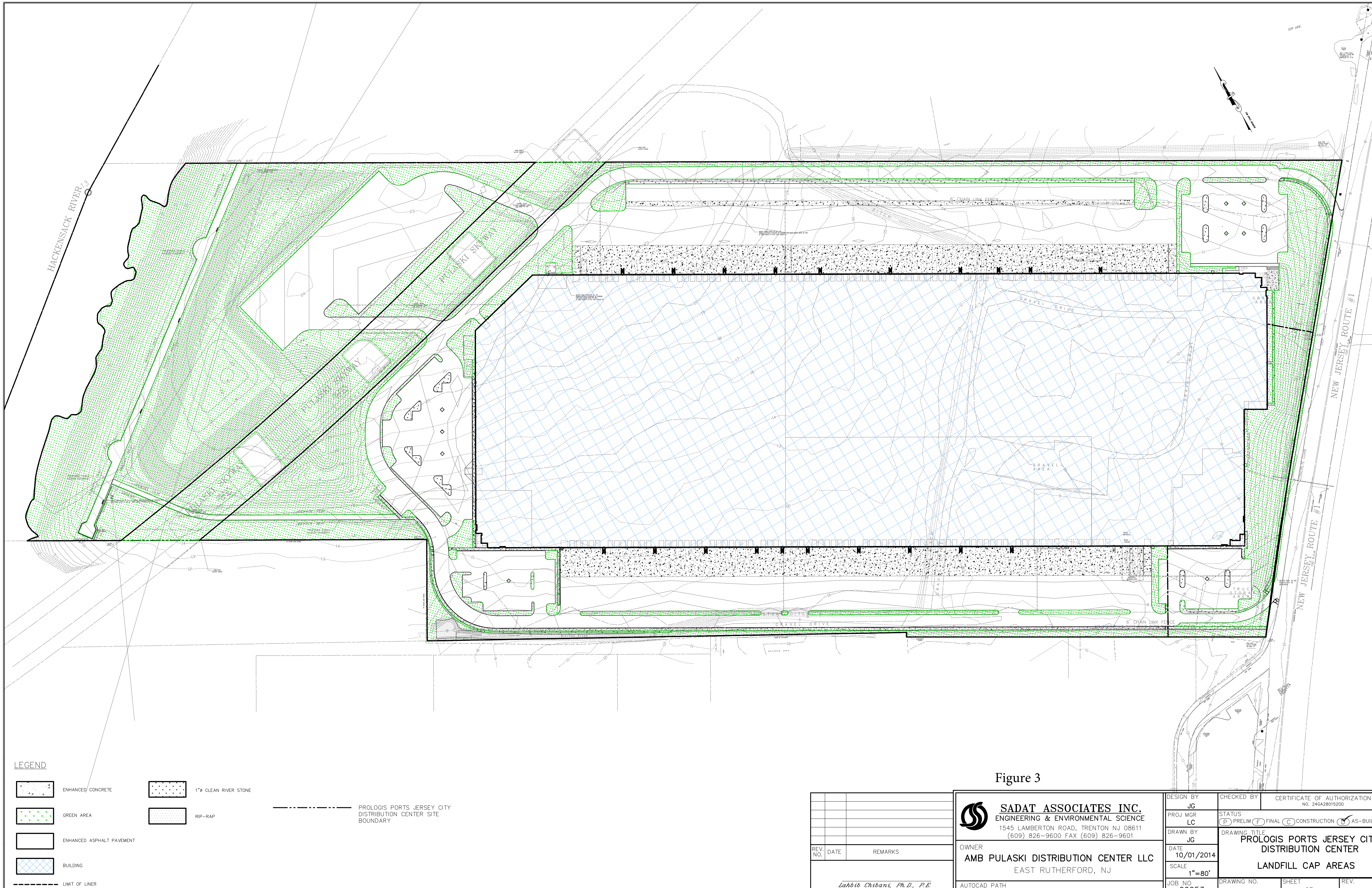


Figure 3

REV. NO.	DATE	REMARKS

Lahbib Chibani, Ph.D., P.E.
Professional Engineering License No. 37055

SADAT ASSOCIATES INC.
ENGINEERING & ENVIRONMENTAL SCIENCE
1545 LAMBERTON ROAD, TRENTON NJ 08611
(609) 826-9600 FAX (609) 826-9601

OWNER
AMB PULASKI DISTRIBUTION CENTER LLC
EAST RUTHERFORD, NJ

AUTOCAD PATH
G:\PJP landfill\2014 as-built

DESIGN BY: JG
PROJ MGR: LC
DRAWN BY: JG
DATE: 10/01/2014
SCALE: 1"=80'
JOB NO: 06053

CHECKED BY:
CERTIFICATE OF AUTHORIZATION NO. 24GA28015200

STATUS: (P) PRELIM (F) FINAL (C) CONSTRUCTION (D) AS-BUILT

DRAWING TITLE
PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER
LANDFILL CAP AREAS

DRAWING NO. | SHEET OF | REV.

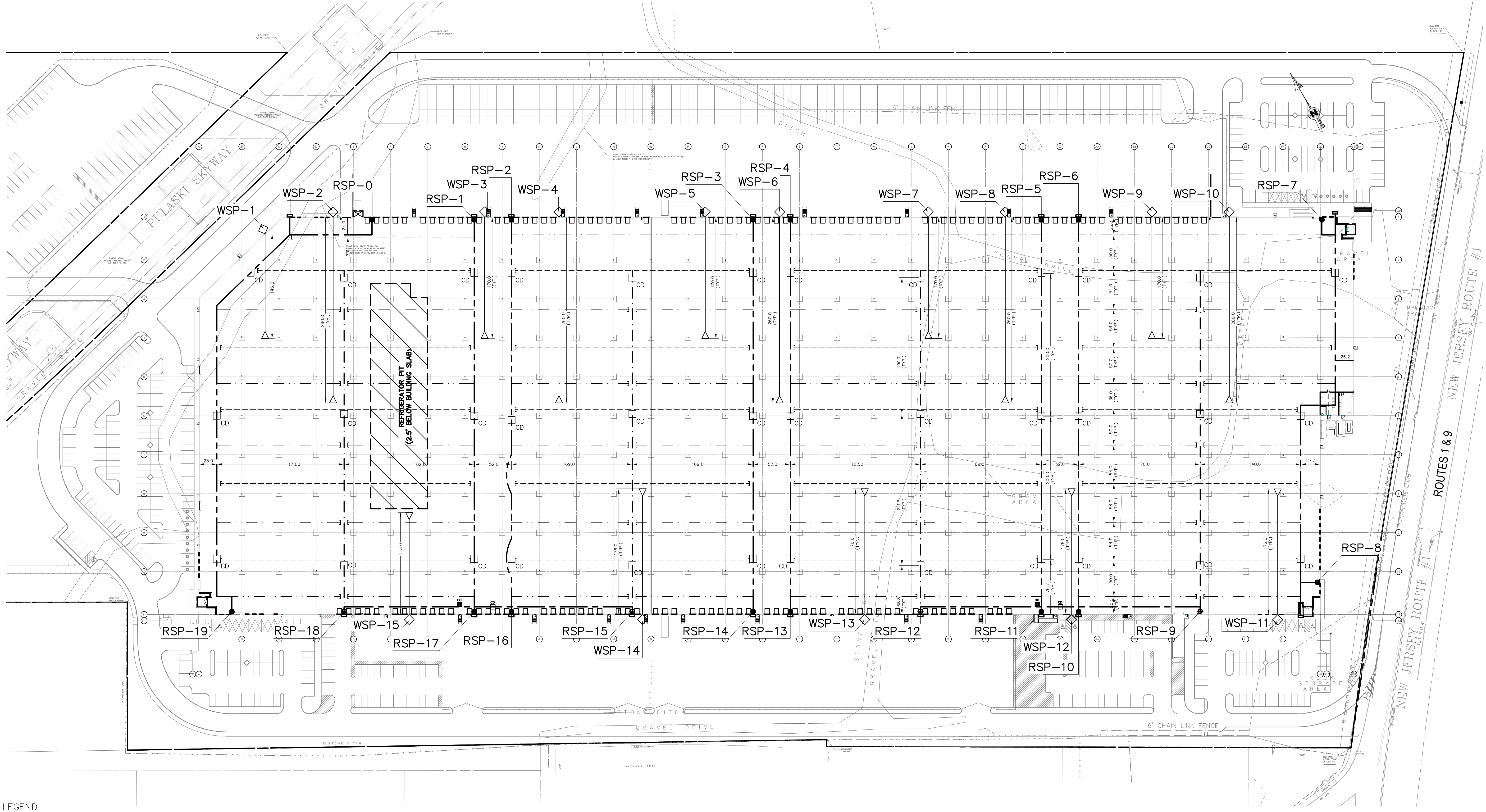


Figure 4

REV. NO.	DATE	REMARKS

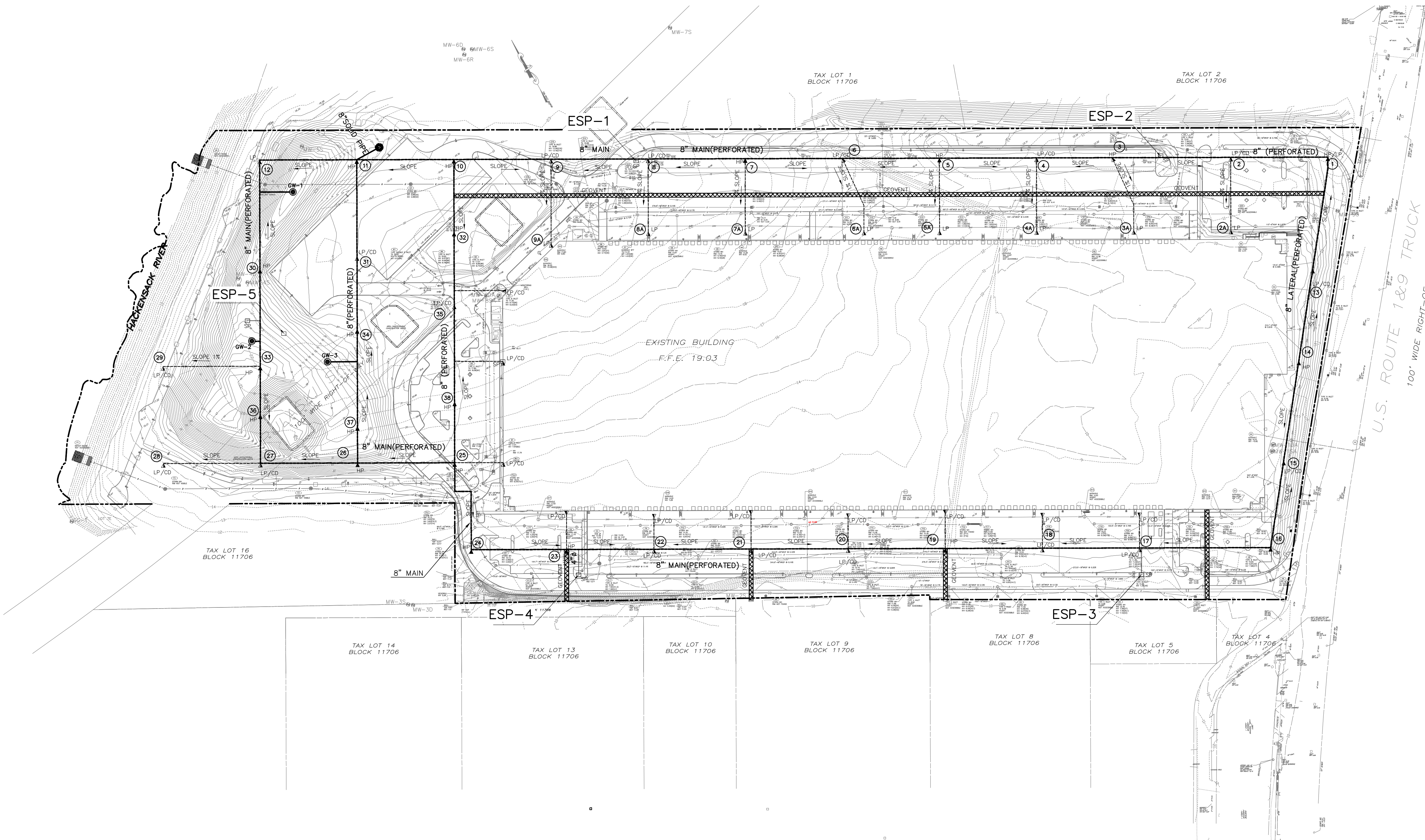
Lahbib Chibani, Ph.D., P.E.
Professional Engineering License No. 37055

SADAT ASSOCIATES INC.
ENGINEERING & ENVIRONMENTAL SCIENCE
1545 LAMBERTON ROAD, TRENTON NJ 08611
(609) 826-9600 FAX (609) 826-9601

OWNER
AMB PULASKI DISTRIBUTION CENTER LLC
EAST RUTHERFORD, NJ

AUTOCAD PATH

DESIGN BY	JG
CHECKED BY	
CERTIFICATE OF AUTHORIZATION	NO. 24GA28015200
PROJ MGR	LC
STATUS	(P) PRELIM (F) FINAL (C) CONSTRUCTION (✓) AS-BUILT
DRAWN BY	JG
DATE	10/01/2014
SCALE	1"=60'
DRAWING TITLE	PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER BUILDING GAS SAMPLING PORT LOCATIONS
JOB NO.	06053
DRAWING NO.	
SHEET	OF
REV.	



PVI	station (ft)	elevation (ft)	Low/High
Alignment: 1 to 12			
1	0	NA	HP
2	200	NA	LP
3	426	NA	HP
4	600	NA	LP
5	800	NA	HP
6	1000	NA	HP
7	1200	NA	LP
8	1400	NA	HP
9	1600	NA	LP
10	1800	NA	HP
11	2000	NA	HP
12	2200	NA	LP
Alignment: 1 to 28			
1	0	NA	LP
13	234	NA	LP
14	426	NA	HP
15	634	NA	LP
16	814	NA	HP
17	1084	NA	LP
18	1284	NA	LP
19	1484	NA	HP
20	1684	NA	LP
21	1884	NA	HP
22	2084	NA	LP
23	2264	NA	HP
24	2460	NA	HP
25	2674	NA	HP
26	2874	NA	HP
27	3074	NA	LP
28	3274	NA	LP
Alignment: 10 to 25			
10	0	NA	HP
32	150	NA	HP
35	300	NA	LP
38	500	NA	HP
25	625	NA	LP
Alignment: 11 to 26			
11	0	NA	HP
31	200	NA	LP
34	350	NA	HP
37	550	NA	HP
26	625	NA	LP
Alignment: 12 to 27			
12	0	NA	LP
30	225	NA	HP
33	425	NA	HP
36	525	NA	HP
27	625	NA	LP

NA– NOT AVAILABLE

LEGEND

Figure 5

REV. NO.	DATE	REMARKS

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Professional Engineering License No. 37055

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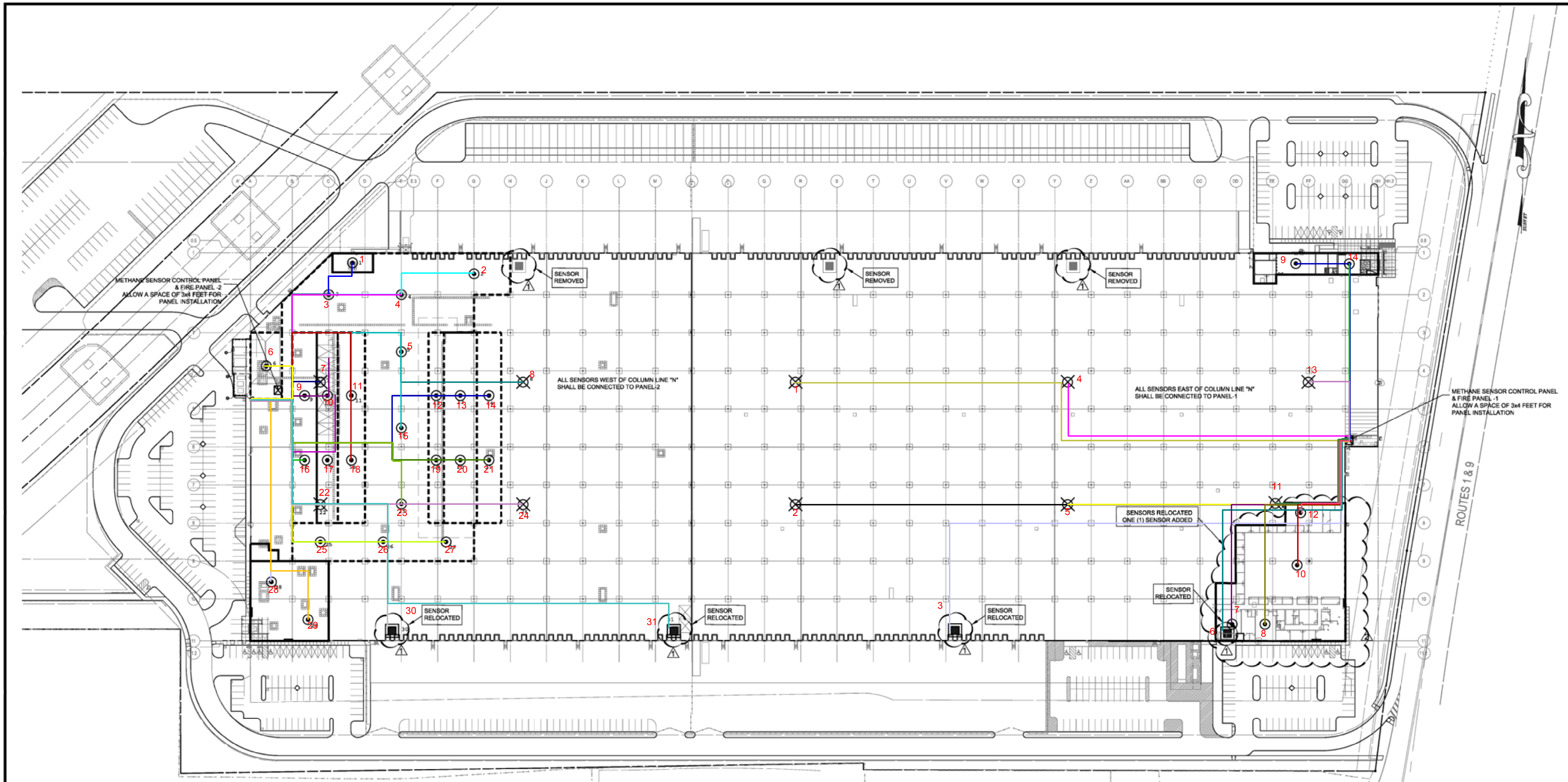
(609) 826-9600 FAX (609) 826-9601

OWNER
AMB PULASKI DISTRIBUTION CENTER LLC
EAST RUTHERFORD, NJ

AUTOCAD PATH
G:\PJP landfill\2014 as-built

DESIGN BY: JG
CHECKED BY:
CERTIFICATE OF AUTHORIZATION NO. 24GA28015200
PROJ MGR: LC
STATUS: (P) PRELIM (F) FINAL (C) CONSTRUCTION (✓) AS-BUILT
DRAWN BY: JG
DRAWING TITLE: PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER EXTERNAL GAS SAMPLING PORT LOCATIONS
DATE: 10/01/2014
SCALE: 1"=100'
JOB NO: 06053
DRAWING NO.
SHEET OF
REV.



Scale 1" = 60'

LEGEND

- CEILING LEVEL SENSOR (30)
- ROOF LEVEL SENSOR (10) (AT ROOF HIGH POINTS)
- SUB-SLAB METHANE SENSOR LOCATION (6)
- OFFICE SPACE
- REFRIGERATOR/FREEZER/UTILITY SPACE

METHANE DETECTION SENSOR PLACEMENT PROTOCOL

BUILDING INTERIORS

OFFICE AREAS

ONE METHANE DETECTION SENSOR/COLLETION TUBE SHALL BE PLACED IN EACH ENCLOSED AREA EXCEEDING 1,000 SQUARE FEET, AT A MINIMUM FREQUENCY OF 1 SENSOR FOR EACH 10,000 SQ. FEET, OR PORTION THEREOF.

METHANE DETECTION SENSORS/COLLETION TUBES SHALL BE PLACED WITHIN 6 TO 12 INCHES OF THE BOTTOM OF THE FIXED CEILING. METHANE SENSORS/COLLECTION TUBES SHALL INSTALLED THROUGH DROP CEILINGS INTO THE OCCUPIED SPACE.

WAREHOUSE AREAS

ONE METHANE DETECTION SENSOR/COLLECTION TUBE SHALL BE PLACED IN EACH ENCLOSED AREA EXCEEDING 10,000 SQUARE FEET, AT A MINIMUM FREQUENCY OF 1 SENSOR FOR EACH 150,000 SQ. FEET, OR PORTION THEREOF.

METHANE DETECTION SENSORS/COLLECTIONTUBES SHALL BE PLACED WITHIN 24 INCHES OF THE ROOF FOR WAREHOUSE AREAS.

SUB-SLAB

SUB SLAB SENSORS/COLLECTION TUBES SHALL BE INSTALLED IN THE AIR EXHAUST RISERS.

NOTES

(1) ALL SENSORS (CONTROL PANEL) SHALL BE CONNECTED TO A TRANSMITTER WHICH WILL ALARM AT THE CONTROLLER WITH A WARNING LIGHT AT 1% METHANE BY VOLUME (20% LEL), *AND ALARM VISUALLY AND AUDIBLY AT 2% METHANE BY VOLUME (40% LEL). THE RESPONSE TO THE 40% LEL ALARAM MAY BE DISCUSSED AND MODIFIED WITH THE CLIENT AND THE FUTURE TENANTS.*

(2) ALL SENSOR ALARMS SHALL BE AUTOMATICALLY TRANSMITTED TO THE PROPERTY MANAGEMENT SERVICES COMPANY. A RESPONDER SHALL PERFORM AN INSPECTION OF THE TRIGERRED SENSOR(S) WITHIN A PERIOD OF 4-HOURS. IF AN ACTION IS REQUIRED (E.G., REPLACING A FAILED SENSOR, REPAIRING OR ADJUSTING THE SITE LANDFILL GAS RECOVERY SYSTEM) IT WILL BE IMPLEMENTED WITHIN A PERIOD OF 8-HOURS.

(3) THE CONTROLLER SHALL BE LOCATED IN THE BUILDING GENERAL UTILITY ROOM WITH THE FIRE ALARM AND ELECTRICAL SYSTEM CONTROL PANELS. THE PROPOSED LOCATIONS OF THE CONTROL PANELS SHOWN ON THE DRAWINGS WILL BECOME FINAL UPON OWNER/TENEAT APPROVALS.

(5) SENSORS SHALL BE INSTALLED & MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, WHICH ALLOWS FOR TESTING AND CALIBRATION OF THE SENSORS AT THE DEDICATED TRANSMITTERS.

(6) THE NUMBER AND LOCATIONS OF THE BUILDING INTERIOR SENSORS/COLLECTION TUBES SHALL BE MODIFIED AS REQUIRED WHEN BUILDING FLOOR PLANS AND/OR TENANT-SPECIFIC OCCUPANCY REQUIREMENTS CHANGE.

SENSOR TYPE	PANEL 1	PANEL 2
CEILING	6	25
ROOF	6	4
SUB-SLAB	2	2
TOTAL	14	31

Figure 6

REFERENCE
1. BUILDING INFORMATION TAKEN FROM "INSULATED METAL PANEL CEILING PLAN" PREPARED BY TIPPMANN CONSTRUCTION, DATED 4-8-2013.
2. BUILDING INFORMATION TAKEN FROM DRAWING PROVIDED BY KSS ARCHITECTS ON 6/11/13.

SESI CONSULTING ENGINEERS
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
CERT. OF AUTH. # 24GA27934700
12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

drawn by: YY
checked by: FD
scale: 1" = 60'
date: 9/11/13

project: 255 TRUCK ROUTE 1 & 9
JERSEY CITY, NJ 07306

drawing title: PRELIMINARY
BUILDING INTERIOR
METHANE SENSOR LOCATION PLAN

job no. 8435
drawing no. CH-1

APPENDIX B

Data Summaries

Blower Flow Readings

Roof Top Blowers - Subslab

		Blower 1	Blower 2	Blower 3	Blower 4
Date	**Personnel**	**CFM**	**CFM**	**CFM**	**CFM**
2/26/2016	SAI	2312	2650	2618	313
3/30/2016	SAI	2518	2609	2760	383
4/28/2016	SAI	2416	2609	2615	379
5/27/2016	SAI	2809	2910	2773	392
6/22/2016	SAI	2739	2973	2538	2946
7/27/2016	SAI	570	3127	2714	418
8/25/2016	SAI	2750	2720	2708	427
9/15/2016	SAI	28	75	2683	527
10/25/2016	SAI	2485	2568	2763	17
11/28/2016	SAI	2757	2802	2303	3095
12/29/2016	SAI	42	59	2753	421
1/25/2017	SAI	2540	2829	3043	Off
2/27/2017	SAI	Off	3130	2730	Off
3/24/2017	SAI	2335	2977	2332	2670
4/18/2017	SAI	2789	Off	Off	3130
5/23/2017	SAI	Off	Off	3036	Off
6/13/2017	SAI	2636	2978	2562	2893
7/26/2017	SAI	2618	2861	2515	Off
8/28/2017	SAI	2560	2441	2187	2625
9/20/2017	SAI	2512	2634	2178	2786
10/27/2017	SAI	2396	2766	2537	2778
11/29/2017	SAI	2490	2783	2624	Off
12/28/2017	SAI	2734	Off	2053	2545

Blower Flow Readings

Gas Collection System (External Blower)

Date	Personnel	CFM
2/26/2016	SAI	1132
3/30/2016	SAI	-
4/28/2016	SAI	1545
5/27/2016	SAI	9.87
6/21/2016	SAI	687
7/27/2016	SAI	1939
8/25/2016	SAI	1816
9/15/2016	SAI	2000
10/25/2016	SAI	1719
11/28/2016	SAI	1829
12/29/2016	SAI	1756
1/25/2017	SAI	750
2/27/2017	SAI	687
3/24/2017	SAI	772
4/18/2017	SAI	758
5/23/2017	SAI	714
6/13/2017	SAI	601
7/26/2017	SAI	Off
8/28/2017	SAI	776
9/20/2017	SAI	771
10/27/2017	SAI	787
11/29/2017	SAI	792
12/28/2017	SAI	710

note: (-) indicates lack of access due to icy conditions

Summary of Under Slab Methane Results

		25-Feb-14		5-Mar-14		12-Mar-14		21-Mar-14		10-Apr-14		7-May-14		2-Jul-14		25-Jul-14		8-Aug-14		22-Aug-14		4-Dec-14		20-Mar-15		21-May-15		22-Aug-15		14-Dec-15		29-Jan-16		21-Jun-16		16-Sep-16		29-Dec-16		13-Jun-17		29-Nov-17	
Type	Name	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL	% air	% LEL
Air Intake	RSP 0	0.6	12	0.5	10	1.4	28	0.4	8	0.3	6	NA	NA	0.2	4	0.2	4	0.1	3	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.2	5	0	0	0.1	0.0	0.0	0	0.0	0	0.0	0
Air Intake	RSP 1	0.7	14	1.5	30	3.8	77	1.1	23	0.4	8	0.4	8	0.2	4	0.2	4	0.1	3	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.2	5	0.3	11	0.1	0.0	0.1	0	0.0	0	0.0	0
Air Intake	RSP 2	0.5	10	1.1	22	3	61	0.4	7	0.3	6	1	19	0.2	4	0.2	4	0.1	3	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.2	5	0.7	21	0.9	16.0	0.2	3	0.0	0	0.0	0
Air Intake	RSP 3	1.2	24	1.8	36	2.5	52	1.8	37	0.3	6	0.4	9	0.2	4	0.2	4	0.1	3	0.3	6	0.2	5	0	0	0	0	0.3	6	0	0	0.2	5	0.2	0	0.3	4.0	0.7	13	0.0	0	0.2	6
Air Intake	RSP 4	1.1	22	1.2	24	2.2	46	1.1	23	0.3	6	0.6	13	0.2	4	0.2	4	0.1	3	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.2	5	0.3	5	0.2	0.0	0.4	7	0.1	0	0.2	7
Air Intake	RSP 5	NS	NS	NS	NS	NS	NS	1	19	0.3	6	0.7	13	0.2	4	0.2	4	0.1	2	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.2	5	0	0	0.1	0.0	0.3	0	0.1	0	0.0	0
Air Intake	RSP 6	NS	NS	NS	NS	NS	NS	1	19	0.5	11	0.5	10	0.2	4	0.2	4	0.1	3	0.1	3	0.3	5	0	0	0	0	0.1	2	0	0	0.2	5	0	0	0.2	0.0	0.1	0	0.0	0	0.0	0
Air Intake	RSP 7	NS	NS	NS	NS	NS	NS	0.3	6	NA	NA	NA	NA	0	5	0.2	4	0.1	3	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.2	5	0	0	0.1	0.0	0.0	0	0.0	0	NA	NA
Air Intake	RSP 8	NS	NS	NS	NS	NS	NS	0.4	8	0.3	7	NA	NA	0.2	4	0.2	4	0.1	3	0.1	3	0.3	6	0	0	0.1	2	0.1	2	0	0	0.3	6	0	0	0.2	0.0	0.0	0	0.0	0	0.0	0
Exhaust	RSP 9	0.9	18	0.6	12	2	40	0.3	6	0.6	13	NA	NA	0.2	5	0.2	4	0.1	3	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.3	6	0	0	0.2	0.0	0.1	0	0.0	0	0.0	0
Air Intake	RSP 10	1.4	28	0.9	18	1.4	30	0.8	16	0.8	16	0.4	9	0.2	4	0.2	4	0.1	3	0.2	4	0.2	5	0	0	0	0	0.2	4	0	0	0.3	6	0	0	0.2	0.0	0.0	0	0.0	0	0.0	0
Air Intake	RSP 11	1.6	32	0.4	8	4	80	1.1	22	0.9	18	0.4	10	0.2	4	0.2	4	0.1	3	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.3	6	0	5	0.2	0.0	-	-	0.0	0	0.0	6
Exhaust	RSP 12	0.8	16	0.6	12	1.5	30	0.8	16	0.6	12	0.5	10	0.2	4	0.2	4	0.1	3	0.2	5	0.2	5	0	0	0	0	0.2	4	0	0	0.3	6	0.2	0	0.2	0.0	0.2	4	0.0	0	0.0	0
Air Intake	RSP 13	NS	NS	NS	NS	NS	NS	0.8	17	0.7	14	0.4	8	0.2	4	0.2	4	0.1	3	0.3	7	0.2	5	0	0	0	0	0.3	6	0	0	0.2	5	0.1	3	0.2	0.0	0.3	5	0.0	0	0.1	3
Air Intake	RSP 14	NS	NS	NS	NS	NS	NS	1.3	27	0.6	13	0.3	7	0.2	4	0.2	4	0.1	3	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.2	5	0.1	0	0.2	0.0	0.7	12	0.0	0	0.2	4
Exhaust	RSP 15	0.6	12	0.6	12	1.1	23	0.5	10	0.8	19	0.3	6	0.2	6	0.2	4	0.2	4	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.2	5	0	0	0.1	0.0	0.9	29	0.0	0	0.3	6
Air Intake	RSP 16	2.1	42	2.4	48	5.6	99	2.4	48	0.9	18	0.6	11	0.2	4	0.2	4	0.1	3	0.7	15	0.2	5	0	0	0	0	0.7	14	0	0	0.2	5	0	0	0.1	0.0	1.4	25	0.0	0	0.5	10
Air Intake	RSP 17	2.3	46	3.3	66	4.6	91	2.1	43	1.1	23	0.8	16	0.2	4	0.2	4	0.1	3	0.2	5	0.5	5	0	0	0	0	0.2	4	0	0	0.2	4	0	0	0.4	5.0	1.3	28	0.0	0	0.3	7
Exhaust	RSP 18	0.6	12	0.6	12	1.3	26	0.5	10	0.4	8	0.3	6	0.2	5	0.2	4	0.2	4	0.2	5	0.2	5	0	0	0	0	0.2	4	0	0	0.2	5	0	0	0.1	0.0	0.2	4	0.0	0	0.0	0
Air Intake	RSP 19	NA	NA	NA	NA	NA	NA	0.4	9	0.3	6	0.2	4	0.2	4	0.2	4	0.1	3	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.2	5	0	0	0.1	0.0	0.0	0	0.0	0	0.0	0
Underslab	WSP 1	NA	NA	NA	NA	5.4	99	0.5	11	0.5	11	0.4	9	6.5	> 99	0.2	5	2	40	0.2	7	0.2	5	1	20	0	0	0.2	4	0	0	0.2	5	0	0	0.1	0.0	0.0	0	0.0	0	0.0	0
Underslab	WSP 2	NA	NA	NA	NA	2	40	1.4	29	2.7	55	2.8	60	2.7	57	0.2	5	2.9	60	2.4	57	0.2	5	2.5	50	0	0	2.4	48	1.3	26	1.9	35	1.1	30	1.2	17.0	1.0	19	0.0	11	0.6	12
Underslab	WSP 3	NA	NA	NA	NA	NA	NA	4.1	86	4.7	95	4.8	99	NA	NA	0.2	4	1.3	27	0.6	13	0.2	5	0	0	0	0	0.6	12	0	0	0.2	5	4.1	0	0.1	0.0	0.0	0	0.0	0	0.0	0
Underslab	WSP 4	NA	NA	NA	NA	NA	NA	1.9	40	4.6	94	2.9	59	0.3	8	0.2	5	0.3	6	0.2	4	0.2	5	0	0	0	0	0.2	4	0	0	0.2	5	0	0	0.1	0.0	0.0	0	0.1	0	0.0	0
Underslab	WSP 5	NA	NA	NA	NA	2.2	43	1.5	31	0.8	16	2.5	48	0	1	0.2	5	0.2	4	0.2	NA	0.2	5	0	0	0	0	0.2	4	0	0	0.2	5	0	0	0.1	0.0	0.0	-	0.0	0	0.0	0
Underslab	WSP 6	NA	NA	NA	NA	0.6	13	0.4	9	0.7	15	0.6	11	0.4	8	0.2	5	0.5	11	0.5	10	0.2	5	0.3	6	0	0	0.5	10	0	0	0.4	8	0	4	0.2	3.0	0.2	3	0.0	0	0.1	4
Underslab	WSP 7	NA	NA	NA	NA	0.6	12	0.8	16	2	42	1.2	24	0.3	22	0.2	5	1.1	22	0.7	15	0.2	5	0.1	2	0	0	0.7	14	0	0	0.2	5	0	0	0.1	0.0	0.1	13	0.0	0	0.1	0
Underslab	WSP 8	NA	NA	NA	NA	NA	NA	0.3	7	0.3	6	0.3	7	0.1	13	0.2	5	0.4	9	0.3	8	0.2	5	0.2	4	0	0	0.3	6	0	0	0.2	5	0	0	0.1	0.0	0.0	0	0.0	0	0.0	0
Underslab	WSP 9	NA	NA	NA	NA	0.3	7	0.4	8	0.3	6	0.2	5	0	0	0.2	5	NA	NA	0.2	4	0.2	5	0	0	0	0	0.2	4	0	0	0.2	4	0	0	0.1	0.0	0.0	0	NS	NS	NS	NS
Underslab	WSP 10	NA	NA	2.1	42	2.3	46	0.6	12	0.8	17	0.4	9	0.7	25	0.2	4	0.3	18	0.4	9	0.2	5	0	0	0	0	0.4	8	0	0	0.2	4	0	0	0.1	0.0	0.1	0	0.0	0	0.0	0
Underslab	WSP 11	NA	NA	0.3	6	0.4	7	0.3	7	NA	NA	0.2	4	0.2	3	0.2	4	0.2	4	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.2	4	0	0	0.1	0.0	0.0	0	0.0	0	0.0	0
Underslab	WSP 12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2	4	NA	NA	0.2	4	0.2	4	0.1	3	Inacessible		0	0	0	0	0	2	0	0	0.2	4	0	0	0.1	0.0	-	-	0.0	0	0.0	0
Underslab	WSP 13	NA	NA	0.3	6	0.4	8	0.3	7	NA	NA	0.2	4	0.2	4	0.2	4	0.2	4	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.2	4	0	0	0.0	0.0	0.0	0	0.0	0	0.0	0
Underslab	WSP 14	NA	NA	NA	NA	0.8	17	0.7	15	NA	NA	0.7	15	0.2	8	0.2	4	0.3	6	0.2	4	0.2	5	0	0	0	0	0.2	4	0	0	0.1	3	0	0	0.1	0.0	0.0	0	0.0	0	0.0	0
Underslab	WSP 15	NA	NA	0.8	16	0.9	18	0.4	9	NA	NA	0.2	5	0.4	11	0.2	4	0.4	9	0.1	3	0.2	5	0	0	0	0	0.1	2	0	0	0.2	3	0	0	0.1	0.0	0.0	0	0.0	4	0.0	0

Notes:
NS: No Sampling port installed on Air Intake Riser
NA: Not Accessible

Vacuum Readings

		13-Jun-17	29-Nov-17
		(in. H_2O)	(in. H_2O)
Air Intake	RSP 0	-0.239	0.000
Air Intake	RSP 1	-0.014	-0.021
Air Intake	RSP 2	-0.008	-0.006
Air Intake	RSP 3	0.000	-0.030
Air Intake	RSP 4	-0.003	-0.032
Air Intake	RSP 5	-0.004	-0.030
Air Intake	RSP 6	0.011	-0.036
Air Intake	RSP 7	0.005	NA
Air Intake	RSP 8	-0.009	-0.010
Exhaust	RSP 9	-0.005	-0.020
Air Intake	RSP 10	-0.006	-0.025
Air Intake	RSP 11	-0.017	-0.055
Exhaust	RSP 12	-0.010	-0.025
Air Intake	RSP 13	-0.003	-0.023
Air Intake	RSP 14	0.014	-0.052
Exhaust	RSP 15	-0.010	-0.040
Air Intake	RSP 16	-0.118	-0.010
Air Intake	RSP 17	-0.034	-0.024
Exhaust	RSP 18	-0.024	-0.010
Air Intake	RSP 19	-0.015	-0.040
Underslab	WSP 1	-0.043	-0.016
Underslab	WSP 2	-0.016	-0.020
Underslab	WSP 3	-0.009	-0.018
Underslab	WSP 4	-0.010	-0.025
Underslab	WSP 5	0.628	8.129
Underslab	WSP 6	-0.035	-0.042
Underslab	WSP 7	-0.045	-0.044
Underslab	WSP 8	-0.005	-0.040
Underslab	WSP 9	NS	NS
Underslab	WSP 10	-0.024	-0.040
Underslab	WSP 11	-0.023	-0.025
Underslab	WSP 12	-0.034	-0.065
Underslab	WSP 13	-0.070	-0.085
Underslab	WSP 14	-0.044	-0.078
Underslab	WSP 15	-0.025	-0.040
Gas Collection	ESP 1	-0.211	-0.035
Gas Collection	ESP 2	0.005	0.012
Gas Collection	ESP 3	-0.005	-0.045
Gas Collection	ESP 4	-0.026	-0.039
Gas Collection	ESP 5	-2.218	-1.569
Hot Spot	HS1	-0.014	-0.012

NA - Not Accessible
NS - Not Sampled

Methane Log (Readings in %LEL)																	
Ahold - West Panel		**Date of Reading**															
Sensor #	**Type**	**1/6/2017**	**1/13/2017**	**1/20/2017**	**1/27/2017**	**2/3/2017**	**2/10/2017**	**2/17/2017**	**2/24/2017**	**3/3/2017**	**3/10/2017**	**3/17/2017**	**3/24/2017**	**3/31/2017**	**4/7/2017**	**4/14/2017**	**4/21/2017**
1	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
4	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
5	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Roof Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
8	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
9	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
10	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
11	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
12	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
13	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
14	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
15	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
16	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
17	Ceiling Level Sensor	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0.1
18	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
19	Ceiling Level Sensor	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0.1
20	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
21	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
22	Roof Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
23	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
24	Roof Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
26	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
27	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
28	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
29	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Sub-slab Sensor	0	0	0	0	5.9	3.9	1.9	6.9	0	0	0	0	5.9	0	0	0.1
31	Sub-slab Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Imperial Bag - East Panel		**Date of Reading**															
Sensor #	**Type**	**1/6/2017**	**1/13/2017**	**1/20/2017**	**1/27/2017**	**2/3/2017**	**2/10/2017**	**2/17/2017**	**2/24/2017**	**3/3/2017**	**3/10/2017**	**3/17/2017**	**3/24/2017**	**3/31/2017**	**4/7/2017**	**4/14/2017**	**4/21/2017**
1	Roof Level Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
2	Roof Level Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
3	Sub-slab Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.2
4	Roof Level Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.2
5	Roof Level Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
6	Sub-slab Sensor	0	0	0	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
7	Ceiling Level Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.2
8	Ceiling Level Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
9	Ceiling Level Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1
10	Ceiling Level Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
11	Roof Level Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.2
12	Ceiling Level Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
13	Roof Level Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1
14	Ceiling Level Sensor	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Methane Log (Readings in %LEL)																	
Ahold - West Panel																	
Sensor #	**Type**	**4/28/2017**	**5/5/2017**	**5/12/2017**	**5/19/2017**	**5/26/2017**	**6/2/2017**	**6/9/2017**	**6/16/2017**	**6/23/2017**	**6/30/2017**	**7/7/2017**	**7/14/2017**	**7/21/2017**	**7/28/2017**	**8/4/2017**	**8/11/2017**
1	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
2	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0
4	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
5	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Roof Level Sensor	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Ceiling Level Sensor	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Ceiling Level Sensor	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Ceiling Level Sensor	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
12	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
13	Ceiling Level Sensor	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	0	0	0	0
15	Ceiling Level Sensor	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
17	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
18	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
19	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0
20	Ceiling Level Sensor	0.1	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
21	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
22	Roof Level Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
23	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
24	Roof Level Sensor	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1
25	Ceiling Level Sensor	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Ceiling Level Sensor	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	0	0	0	0
28	Ceiling Level Sensor	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Ceiling Level Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
30	Sub-slab Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
31	Sub-slab Sensor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
Imperial Bag - East Panel																	
Sensor #	**Type**	**4/28/2017**	**5/5/2017**	**5/12/2017**	**5/19/2017**	**5/26/2017**	**6/2/2017**	**6/9/2017**	**6/16/2017**	**6/23/2017**	**6/30/2017**	**7/7/2017**	**7/14/2017**	**7/21/2017**	**7/28/2017**	**8/4/2017**	**8/11/2017**
1	Roof Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
2	Roof Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
3	Sub-slab Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
4	Roof Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	Roof Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
6	Sub-slab Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
7	Ceiling Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8	Ceiling Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
9	Ceiling Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10	Ceiling Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
11	Roof Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
12	Ceiling Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
13	Roof Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
14	Ceiling Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Methane Log (Readings in %LEL)																	
Ahold - West Panel																	
Sensor #	**Type**	**8/18/2017**	**8/25/2017**	**9/1/2017**	**9/8/2017**	**9/15/2017**	**9/22/2017**	**9/29/2017**	**10/6/2017**	**10/13/2017**	**10/20/2017**	**10/27/2017**	**11/3/2017**	**11/10/2017**	**11/17/2017**	**11/24/2017**	**12/1/2017**
1	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1
3	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Roof Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1
12	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1
13	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1
21	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Roof Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1
23	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Roof Level Sensor	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Ceiling Level Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Sub-slab Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Sub-slab Sensor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Imperial Bag - East Panel																	
Sensor #	**Type**	**8/18/2017**	**8/25/2017**	**9/1/2017**	**9/8/2017**	**9/15/2017**	**9/22/2017**	**9/29/2017**	**10/6/2017**	**10/13/2017**	**10/20/2017**	**10/27/2017**	**11/3/2017**	**11/10/2017**	**11/17/2017**	**11/24/2017**	**12/1/2017**
1	Roof Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
2	Roof Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
3	Sub-slab Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
4	Roof Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	Roof Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
6	Sub-slab Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
7	Ceiling Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8	Ceiling Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
9	Ceiling Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10	Ceiling Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
11	Roof Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
12	Ceiling Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
13	Roof Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
14	Ceiling Level Sensor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Methane Log (Readings in %LEL)					
Ahold - West Panel					
Sensor #	**Type**	**12/8/2017**	**12/15/2017**	**12/22/2017**	**12/29/2017**
1	Ceiling Level Sensor	0	0	0	0
2	Ceiling Level Sensor	0.1	0.1	0.1	0.1
3	Ceiling Level Sensor	0	0	0	0
4	Ceiling Level Sensor	0	0	0	0
5	Ceiling Level Sensor	0	0	0	0
6	Ceiling Level Sensor	0	0	0	0
7	Roof Level Sensor	0	0	0	0
8	Ceiling Level Sensor	0	0	0	0
9	Ceiling Level Sensor	0	0	0	0
10	Ceiling Level Sensor	0	0	0	0
11	Ceiling Level Sensor	0.1	0.1	0.1	0.1
12	Ceiling Level Sensor	0.1	0.1	0.1	0.1
13	Ceiling Level Sensor	0	0	0	0
14	Ceiling Level Sensor	0	0	0	0
15	Ceiling Level Sensor	0	0	0	0
16	Ceiling Level Sensor	0	0	0	0
17	Ceiling Level Sensor	0	0	0	0
18	Ceiling Level Sensor	0	0	0	0
19	Ceiling Level Sensor	0	0	0	0
20	Ceiling Level Sensor	0.1	0.1	0.1	0.1
21	Ceiling Level Sensor	0	0	0	0
22	Roof Level Sensor	0.1	0.1	0.1	0.1
23	Ceiling Level Sensor	0	0	0	0
24	Roof Level Sensor	0	0	0	0
25	Ceiling Level Sensor	0	0	0	0
26	Ceiling Level Sensor	0	0	0	0
27	Ceiling Level Sensor	0	0	0	0
28	Ceiling Level Sensor	0	0	0	0
29	Ceiling Level Sensor	0	0	0	0
30	Sub-slab Sensor	0	0	0	0
31	Sub-slab Sensor	0	0	0	0
Imperial Bag - East Panel					
Sensor #	**Type**	**12/8/2017**	**12/15/2017**	**12/22/2017**	**12/29/2017**
1	Roof Level Sensor	0.2	0.2	0.2	0.2
2	Roof Level Sensor	0.2	0.2	0.2	0.2
3	Sub-slab Sensor	0.2	0.2	0.2	0.2
4	Roof Level Sensor	0.2	0.2	0.2	0.2
5	Roof Level Sensor	0.2	0.2	0.2	0.2
6	Sub-slab Sensor	0.2	0.2	0.2	0.2
7	Ceiling Level Sensor	0.2	0.2	0.2	0.2
8	Ceiling Level Sensor	0.2	0.2	0.2	0.2
9	Ceiling Level Sensor	0.2	0.2	0.2	0.2
10	Ceiling Level Sensor	0.2	0.2	0.2	0.2
11	Roof Level Sensor	0.2	0.2	0.2	0.2
12	Ceiling Level Sensor	0.2	0.2	0.2	0.2
13	Roof Level Sensor	0.2	0.2	0.2	0.2
14	Ceiling Level Sensor	0.2	0.2	0.2	0.2

APPENDIX C

Site Inspection Forms, Photographic Area Map and Photograph Logs

Area Number - Description
1 - South East Parking Lot
2 - Southern Parking Lot
3 - Southern Perimeter Road/Walkway
4 - South East Truck Lot
5 - South West Truck Lot
6 - South West Parking Lot
7 - Southern Headwall
8 - Southern Swale
9 - Western Parking Lot
10 - Wetlands Walkway
11 - Mound
12 - Wetlands Area
13 - Western Back Parking Lot
14 - North West Truck Lot
15 - Northern Perimeter Road
16 - North Truck Lot
17 - North East Parking Lot
18 - Eastern Walkway

LEGEND

—·—·—·— PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER SITE BOUNDARY

NOTES

1. THIS DRAWING IS BASED ON DRAWING PROVIDED BY CONTROL LAYOUT INC,. LAND SURVEYORS, ENTITLED " ALTA/ACSM LAND TITLE SURVEY" FOR BLOCK 11706 LOT 3 AND 11707 LOT 3, DATED SEPTEMBER 12, 2015.
2. SITE IS IN NAVD 1988 DATUM.
* THIS PARCEL OF THE PROPERTY IS REFERRED TO ON THE CITY OF JERSEY CITY TAX MAP AS TAX LOT 3 BLOCK 11706.

REV. NO.	DATE	REMARKS

Lahbib Chibani, Ph.D., P.E.
Professional Engineering License No. 37055

SADAT ASSOCIATES INC.
ENGINEERING & ENVIRONMENTAL SCIENCE
1545 LAMBERTON ROAD, TRENTON NJ 08611
(609) 826-9600 FAX (609) 826-9601

OWNER
AMB PULASKI DISTRIBUTION CENTER LLC
EAST RUTHERFORD, NJ

AUTOCAD PATH
G:\PJP landfill\2014 as-built

DESIGN BY: JG
CHECKED BY:
CERTIFICATE OF AUTHORIZATION NO. 24GA28015200
PROJ MGR: LC
STATUS: (P) PRELIM (F) FINAL (C) CONSTRUCTION (D) AS-BUILT
DRAWN BY: JG
DRAWING TITLE: PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER
PHOTO AREA REFERENCE MAP
DATE: 10/01/2014
SCALE: 1"=80'
JOB NO: 06053
DRAWING NO.:
SHEET: OF
REV.:

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather Sunny
Temperature 90°F

Final Cover (Building Area) Inspection Monitoring Form

Inspector	
Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date	
Annual	
Semi-Annually	6/13/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of cover material	x		
2. Settlement	x		
3. Cracks	x		
4. Seepage	x		

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather	Sunny
Temperature	90°F

Final Cover (Paved Area) Inspection Monitoring Form

Inspector	
Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date	
Annual	
Semi-Annually	6/13/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of cover material	x		
2. Settlement	x		
3. General condition of access roads	x		
4. General condition of walkway	x		
5. Cracks	x		
6. Seepage	x		

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather: Sunny
Temperature: 90°F

Final Cover (Concrete Area) Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	6/13/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of cover material	x		
2. Settlement	x		
3. General condition of loading area	x		
4. General condition of dolly	x		
5. General condition of sidewalk	x		
6. Cracks	x		
7. Seepage	x		

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather Sunny
Temperature 90°F

Final Cover (Green Area) Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	6/13/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of cover material		x	Repair Damage
2. Settlement	x		
3. Erosion control		x	Seeding needed
4. Animal burrows	x		
5. Large weeds or woody species	x		
6. Vegetative growth	x		
7. Seepage	x		

Additional Comments :

Seeding is needed to help erosion control. See Photo 10.
Seeding is needed to promote full vegetative coverage. See Photos 23, 35, and 36.
Repair surficial damage. See Photo 46.

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather	Sunny
Temperature	90°F

Hackensack Riverbank Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	6/13/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of cover material	x		
2. Settlement	x		
3. Erosion	x		
4. Sideslope integrity	x		
5. Loss of vegetation and/or rip-rap	x		
6. Scouring	x		

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather: Sunny
Temperature: 90°F

Security System Inspection Monitoring Form

Inspector	
Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date	
Annual	
Semi-Annually	6/13/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of security system	x		
2. Fence condition	x		
3. Lock	x		
4. Cameras			

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather: Sunny
Temperature: 90°F

Stormwater Management System Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	6/13/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of channels	x		
2. Settlement control	x		
3. Erosion control		x	Seeding along Swale Slope
4. Animal burrowing	x		
5. Flow capacity	x		
6. Rip rap protection	x		
7. Vegetation control	x		
8. Structural integrity of inlets, culverts, etc.	x		
9 Unauthorized obstruction, damage or disturbances		x	Damaged Stormwater Catch Basin Cover
10 Excessive accumulation of leaves, silt and sediment	x		

Additional Comments :

Seeding for Erosion Control is Needed: See Photo 10.

Damaged Stormwater Catch Basin Cover. See Photo 54. Stormwater system performance is not affected.

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather: Sunny
Temperature: 90°F

Ground Water Monitoring System Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	6/13/2017
Other	

Item	Adequate	Needs Attention	Action Required
LOCATION/IDENTIFICATION			
1. Is well readily accessible?	x		
2. Is well in a protected area or in a vulnerable traffic area?	x		
3. Is well situated outside a low point or ponded water?	x		
4. Is well head area free of waste, stored chemicals, etc.?	x		
5. Is well flagged or painted?			
6. Is well labeled inside and outside?	x		
SURFACE SEAL			
1. Is concrete surface seal in good condition (i.e. no cracks)?	x		
2. Is the seal secure against the casing and ground surface?	x		
3. Is the seal sloped away from the well head?	x		
EXTERNAL CASING			
1. Does well have external casing in good condition (i.e. no cracks)?	x		
2. Is external casing locked?	x		
3. Is lock in good condition (i.e. no severe rust)?	x		
4. Is casing/annulus in good condition and free of	x		
INTERNAL CASING			
1. Is internal casing at least 1-foot above ground?	-		
2. Is casing tight horizontally/vertically/rotationally?	x		
3. Is casing free of animals/debris/kinks or bends?	x		

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather	Sunny
Temperature	90°F

Gas Collection System Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	6/13/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. Blower operation and related appurtenances	x		
2. Control panel operation and accessibility	x		
3. Is sampling station readily accessible?	x		
4. Is sampling station in a protected area or in a	x		
5. Condition of valves and appurtenances	x		
6. Condition of sampling ports	x		
7. Pipe condition	x		
8. Is exhaust in good condition and free of	x		

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather	**Sunny**
Temperature	**90°F**

Under Slab Gas Venting System Inspection Monitoring Form

Inspector

Company	**Sadat Associates, Inc**
Name	**Nick Morgan**
Title	**Project Scientist**

Inspection Date

Annual	
Semi-Annually	**6/13/2017**
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of system	x		
2. Blower operation and related appurtenances	x		
3. Sampling ports accessibility/integrity		x	WSP-9 had a broken tube
			No repair needed.
4. Riser condition	x		
5. Air intake clearance	x		
6. Control panel operation and accessibility	x		

Additional Comments :

WSP-9 had a broken tube. There are sufficient sampling ports throughout the building to collect data regarding the performance of the underslab gas venting system. Therefore, WSP-9 will not be used in further sampling.

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather	Sunny
Temperature	90°F

Above Slab Gas Detection System Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	6/13/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of system	x		
2. Control panel operation and accessibility	x		
3. Condition of each gas detector	x		
4. Alarms and faults	x		
5. Condition of sensor tubing and appurtenances	x		

Additional Comments :

Photo Summary Table: 6/13/17 Prologis Semi-Annual Site Inspection

Photo #	Location	Photo Location Number (See Applicable Points on Photo Area Map)	Description
1	Southern Perimeter	3	South Front End Cover
2	Southern Perimeter	3	South Sidewalk
3	Southern Perimeter	3	South Catch Basin along Sidewalk; Free of Debris
4	Southern Perimeter	3	South Catch Basin along Sidewalk; Free of Debris
5	Southern Perimeter	3	South Sidewalk
6	Southern Perimeter	3	Stormwater Drain Free and Clear of Debris
7	South East Truck Lot	4	South East Truck Lot Pavement Cover
8	South East Truck Lot	4	South East Truck Lot Pavement Cover
9	Southern Swale	8	South Swale; Free of Debris and Wall Intact
10	Southern Swale	8	South Swale; Erosion, Requires Seeding
11	Southern Headwall	7	South Headwall/Retaining Wall Intact
12	Southern Headwall	7	South Headwall Intact
13	Southern Headwall	7	Vegetation above South Headwall
14	South West Truck Lot	5	South Truck Lot Pavement Cover
15	South West Truck Lot	5	South Truck Lot Pavement Cover
16	South West Parking Lot	6	South West Car Lot Pavement Cover
17	South West Parking Lot	6	South West Car Lot Pavement Cover
18	South West Parking Lot	6	South West Car Lot Walkway Concrete Cover
19	Western Parking Lot	9	West Car Lot; Good Vegetation
20	Western Parking Lot	9	West Car Lot Pavement Cover
21	Western Parking Lot	9	West Car Lot Pavement Cover
22	Western Parking Lot	9	West Car Lot Walkway Concrete Cover
23	Wetlands Walkway	10	Area Requires Some Seeding
24	Mound	11	Good Seeding
25	Wetlands Area	12	Wetlands Walkway Free of Debris
26	Wetlands Area	12	Good Vegetation Coverage
27	Mound	11	MW-4S; Intact and Locked
28	Wetlands Area	12	Good Vegetation Coverage
29	Mound	11	External Blower
30	Mound	11	External Blower Control Panel ON
31	Mound	11	Vegetation Along Fence Good
32	Western Back Lot	13	Wetlands Fence Locked
33	Western Back Lot	13	Western Back Lot Pavement Cover
34	Western Back Lot	13	Western Back Lot Pavement Cover
35	Western Back Lot	13	Area Requires Seeding
36	Western Back Lot	13	Area Requires Seeding
37	Western Back Lot	13	Sufficient Seeding
38	Western Side of Building		MW-8DR3; Intact and Locked
39	Western Side of Building		MW-8SR2; Intact and Locked
40	Western Side of Building		Vegetation Good
41	Western Perimeter Road		Seeding Good
42	North West Truck Lot	14	Hole in Pavement Fixed, New Fence Post
43	North West Truck Lot	14	Vegetation Near Entrance Good
44	North West Truck Lot	14	Vegetation Near Entrance Good
45	North West Truck Lot	14	North West Truck Lot Pavement Cover
46	Northern Perimeter	15	Slight Cover Damage
47	Northern Perimeter	15	Northern Perimeter Road Pavement Cover
48	Northern Perimeter	15	Northern Perimeter Road; Stormwater Drain Free of Debris
49	Northern Perimeter	15	Entrance to North Truck Lot; Good Vegetation
50	North Truck Lot	16	North Truck Lot Pavement Cover
51	North Truck Lot	16	North Truck Lot Pavement Cover
52	Northern Parking Lot	17	Northern Parking Lot Pavement Cover
53	Northern Parking Lot	17	Northern Parking Lot Pavement Cover
54	Northern Perimeter	15	Northern Perimeter; Stormwater Catch Basin Cover Broken, Needs to be Replaced
55	Northern Perimeter	15	Concrete Slab Fixed
56	Eastern Side of Building		Eastern Side of Building; Good Vegetation
57	Eastern Side of Building		Eastern Side of Building; Concrete Walkway Cover
58	Eastern Side of Building		Eastern Side of Building; Good Vegetation
59	Eastern Side of Building		MW-1SR; Intact and Locked
60	South East Parking Lot	1	South East Parking Lot Cover
61	South East Parking Lot	1	South East Parking Lot Cover
62	South East Parking Lot	1	South East Parking Lot Cover
63	South Parking Lot	2	South Parking Lot Cover
64	South Parking Lot	2	South Parking Lot Cover
65	South Parking Lot	2	South Parking Lot Cover
66	Roof		Blower 1
67	Roof		Blower 2
68	Roof		Blower 3
69	Roof		Blower 4
70	Blower Control Room	1	Blower Control Panels
71	Blower Control Room	1	Blower Timers
72	Eastern Side of Building		Methane Detectors; Functioning Normally
73	Imperial South Side Wall		RSP-10
74	Ahold Entrance Room		RSP-19
75	Ahold North Side Wall		RSP-1
76	Western Parking Lot	9	HOT SPOT
77	Southern Perimeter near Southwest Car Lot	6	ESP-4
78	Mound	11	ESP-5
79	North Truck Lot	16	WSP-5
80	South West Truck Lot	5	WSP-15

Prologis Ports Jersey City Distribution Center

Part of the Former PJP Landfill

Jersey City, Hudson County, New Jersey

Weather: Partly Cloudy

Temperature: 46°F

Final Cover (Building Area) Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	11/29/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of cover material	x		
2. Settlement	x		
3. Cracks	x		
4. Seepage	x		

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather	Partly Cloudy
Temperature	46°F

Final Cover (Paved Area) Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	11/29/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of cover material	x		
2. Settlement	x		
3. General condition of access roads	x		
4. General condition of walkway	x		
5. Cracks	x		
6. Seepage	x		

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather: Partly Cloudy
Temperature: 46°F

Final Cover (Concrete Area) Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	11/29/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of cover material	x		
2. Settlement	x		
3. General condition of loading area	x		
4. General condition of dolly	x		
5. General condition of sidewalk	x		
6. Cracks	x		
7. Seepage	x		

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather	Partly Cloudy
Temperature	46°F

Final Cover (Green Area) Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	11/29/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of cover material	x		
2. Settlement	x		
3. Erosion control	x		
4. Animal burrows	x		
5. Large weeds or woody species	x		
6. Vegetative growth	x		
7. Seepage	x		

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather	Partly Cloudy
Temperature	46°F

Hackensack Riverbank Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	11/29/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of cover material	x		
2. Settlement	x		
3. Erosion	x		
4. Sideslope integrity	x		
5. Loss of vegetation and/or rip-rap	x		
6. Scouring	x		

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather: Partly Cloudy
Temperature: 46°F

Security System Inspection Monitoring Form

Inspector	
Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date	
Annual	
Semi-Annually	11/29/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of security system	x		
2. Fence condition	x		
3. Lock	x		
4. Cameras			

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather: Partly Cloudy
Temperature: 46°F

Stormwater Management System Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	11/29/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of channels	x		
2. Settlement control	x		
3. Erosion control	x		
4. Animal burrowing	x		
5. Flow capacity	x		
6. Rip rap protection	x		
7. Vegetation control	x		
8. Structural integrity of inlets, culverts, etc.	x		
9 Unauthorized obstruction, damage or disturbances	x		Damaged Stormwater Catch Basin Cover
10 Excessive accumulation of leaves, silt and sediment	x		

Additional Comments :

Damaged Stormwater Catch Basin Cover (See June 13, 2017 Inspection). Repair is being scheduled for 2018.

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather Partly Cloudy
Temperature 46°F

Ground Water Monitoring System Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	11/29/2017
Other	

Item	Adequate	Needs Attention	Action Required
LOCATION/IDENTIFICATION			
1. Is well readily accessible?	x		
2. Is well in a protected area or in a vulnerable traffic area?	x		
3. Is well situated outside a low point or ponded water?	x		
4. Is well head area free of waste, stored chemicals, etc.?	x		
5. Is well flagged or painted?			
6. Is well labeled inside and outside?	x		
SURFACE SEAL			
1. Is concrete surface seal in good condition (i.e. no cracks)?	x		
2. Is the seal secure against the casing and ground surface?	x		
3. Is the seal sloped away from the well head?	x		
EXTERNAL CASING			
1. Does well have external casing in good condition (i.e. no cracks)?	x		
2. Is external casing locked?	x		
3. Is lock in good condition (i.e. no severe rust)?	x		
4. Is casing/annulus in good condition and free of water/animals/debris?	x		
INTERNAL CASING			
1. Is internal casing at least 1-foot above ground?	-		
2. Is casing tight horizontally/vertically/rotationally?	x		
3. Is casing free of animals/debris/kinks or bends?		x	MW-4S is blocked and MW-5SR is bent

Additional Comments :

The internal casing of MW-4S has blockage and the internal casing of MW-5SR is bent. Repair is being scheduled in 2018.

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather: Partly Cloudy
Temperature: 46°F

Gas Collection System Inspection Monitoring Form

Inspector

Company	Sadat Associates, Inc
Name	Nick Morgan
Title	Project Scientist

Inspection Date

Annual	
Semi-Annually	11/29/2017
Other	

Item	Adequate	Needs Attention	Action Required
1. Blower operation and related appurtenances	x		
2. Control panel operation and accessibility	x		
3. Is sampling station readily accessible?	x		
4. Is sampling station in a protected area or in a vulnerable traffic area?	x		
5. Condition of valves and appurtenances	x		
6. Condition of sampling ports	x		
7. Pipe condition	x		
8. Is exhaust in good condition and free of water/animals/debris?	x		

Additional Comments :

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather	**Partly Cloudy**
Temperature	**46°F**

Under Slab Gas Venting System Inspection Monitoring Form

Inspector

Company	**Sadat Associates, Inc**
Name	**Nick Morgan**
Title	**Project Scientist**

Inspection Date

Annual	
Semi-Annually	**11/29/2017**
Other	

Item	**Adequate**	**Needs Attention**	**Action Required**
1. General condition of system	**x**		
2. Blower operation and related appurtenances	**x**		
3. Sampling ports accessibility/integrity		**x**	**RSP-7 blocked by**
			tenant operations
4. Riser condition	**x**		
5. Air intake clearance	**x**		
6. Control panel operation and accessibility	**x**		

Additional Comments :

RSP-7 was not accessible due to tenant operations. Tenant was advised to clear access to the sampling port.

Prologis Ports Jersey City Distribution Center
Part of the Former PJP Landfill
Jersey City, Hudson County, New Jersey

Weather	**Partly Cloudy**
Temperature	**46°F**

Above Slab Gas Detection System Inspection Monitoring Form

Inspector

Company	**Sadat Associates, Inc**
Name	**Nick Morgan**
Title	**Project Scientist**

Inspection Date

Annual	
Semi-Annually	**11/29/2017**
Other	

Item	Adequate	Needs Attention	Action Required
1. General condition of system	x		
2. Control panel operation and accessibility	x		
3. Condition of each gas detector	x		
4. Alarms and faults	x		
5. Condition of sensor tubing and appurtenances	x		

Additional Comments :

Photo Summary Table: 11/29/17 Prologis Semi-Annual Site Inspection

Photo #	Location	Photo Location Number (See Applicable Points on Photo Area Map)	Description
1	Southern Perimeter	3	South Front End Cover
2	Southern Perimeter	3	South Sidewalk Cover Intact
3	Southern Perimeter	3	South Catch Basin along Sidewalk; Free of Debris
4	Southern Perimeter	3	South Catch Basin along Sidewalk; Free of Debris
5	Southern Perimeter	3	Southern Perimeter Road Cover
6	South East Truck Lot	4	South East Truck Lot Pavement Cover
7	South East Truck Lot	4	South East Truck Lot Pavement Cover
8	Southern Swale	8	Grass Cover Southern Swale
9	Southern Headwall	7	Headwall/Retaining Wall Intact
10	Southern Headwall	7	Headwall/Retaining Wall Intact
11	Southern Swale	8	South Swale Grass Cover
12	Southern Perimeter	3	Southern Perimeter Road Cover
13	Southern Headwall	7	Vegetation Above Headwall
14	South West Truck Lot	5	South Truck Lot Pavement Cover
15	South West Parking Lot	6	South West Car Lot Pavement Cover
16	South West Parking Lot	6	South West Car Lot Pavement Cover
17	South West Parking Lot	6	South West Car Lot Pavement Cover
18	Western Parking Lot	9	West Car Lot; Good Vegetation
19	Western Parking Lot	9	West Car Lot Pavement Cover
20	Western Parking Lot	9	West Car Lot Pavement Cover
21	Western Parking Lot	9	West Car Lot Concrete Walkway Cover
22	Wetlands Walkway	10	Seeding in Progress
23	Wetlands Walkway	10	Walkway Cover
24	Wetlands Walkway	10	Seeding in Progress
25	Mound	11	Seeding in Progress
26	Wetlands Area	12	Walkway Cover
27	Wetlands Area	12	Good Vegetation Coverage
28	Mound	11	MW-4S; Intact and Locked
29	Wetlands Area	12	Good Vegetation Coverage
30	Mound	11	External Blower
31	Mound	11	External Blower Control Panel ON
32	Mound	11	Vegetation Good Condition
33	Western Back Lot	13	Fence to Wetlands Locked
34	Western Back Lot	13	Western Back Lot Pavement Cover
35	Western Back Lot	13	Seeding in Progress
36	Western Back Lot	13	Seeding in Progress
37	Western Back Lot	13	Seeding in Progress
38	Western Side of Building		MW-8DR3; Intact and Locked
39	Western Side of Building		MW-8SR2; Intact and Locked
40	Western Perimeter Road		Seeding in Progress
41	Western Side of Building		Vegetation Good Condition
42	Western Perimeter Road		Seeding in Progress
43	North West Truck Lot	14	Vegetation Near Entrance Good
44	North West Truck Lot	14	Vegetation Near Entrance Good
45	North West Truck Lot	14	North West Truck Lot Pavement Cover
46	North West Truck Lot	14	North West Truck Lot Pavement Cover
47	Northern Perimeter	15	Northern Perimeter Road Cover
48	North Truck Lot	16	Bent Post at Entrance to North Truck Lot Caused Cover Damage
49	Northern Perimeter	15	Entrance to North Truck Lot Cover Damage Repaired 12/11
50	North Truck Lot	16	North Truck Lot Pavement Cover
51	Northern Parking Lot	17	Northern Parking Lot Pavement Cover
52	Northern Parking Lot	17	Northern Parking Lot Pavement Cover
53	Northern Parking Lot	17	Northern Parking Lot Concrete Walkway Cover
54	Northern Parking Lot	17	Northern Parking Lot Pavement Cover
55	Northern Perimeter	15	Concrete Walkway Cover
56	Eastern Side of Building		Eastern Side of Building; Good Vegetation
57	Eastern Side of Building		Eastern Side of Building Concrete Walkway Cover
58	Eastern Side of Building		MW-1SR; Intact and Locked
59	Eastern Side of Building		Eastern Side of Building; Good Vegetation
60	South East Parking Lot	1	South East Parking Lot Walkway Cover
61	South East Parking Lot	1	South East Parking Lot Cover
62	South East Parking Lot	1	South East Parking Lot Cover
63	South Parking Lot	2	South Parking Lot Cover
64	South Parking Lot	2	South Parking Lot Cover
65	Roof		Blower 1
66	Roof		Blower 2
67	Roof		Blower 3
68	Roof		Blower 4
69	Blower Control Room	1	Blower Control Panels
70	Blower Control Room	1	Blower Timers
71	Eastern Side of Building		Methane Detectors; Functioning Normally
72	Ahold Entrance Room		RSP-19
73	Ahold North Side Wall		RSP-1
74	Ahold South Side Wall		RSP-17
75	Western Parking Lot	9	HOT SPOT
76	North Truck Lot	16	WSP-6
77	South West Truck Lot	5	WSP-13
78	North West Truck Lot	14	ESP-1
79	Southern Perimeter near Southwest Car Lot	6	ESP-4

APPENDIX D

NJDEP Air Emission Submittals
Air Sampling Locations
Emission Calculations

Soil Sampling Report
Generator and Disposal Forms

(Attached compact disc includes air emission reports and soil sampling laboratory report)

Sadat Associates, Inc.
Engineering & Environmental Science

A Partner to Clients
with Environmental Needs

July 10, 2017

Ms. Vanessa Day
Bureau Chief
NJDEP – Bureau of Compliance and Enforcement - Northern
7 Ridgedale Avenue
Cedar Knolls, New Jersey 07927

Re: **1st 2017 Air Emissions Sampling Report**
Prologis Ports Jersey City Distribution Center, Jersey City, NJ
Facility ID No.: 12777, PCP080001

Dear Ms. Vanessa:

On behalf of Prologis, Inc., we are submitting the above referenced Report prepared by Environmental Laboratories, Inc. (ELI) as required by the conditions of "U1 Protective Methane Venting System and Exhaust Venting System – OS Summary" of the "Facility Specific Requirements" for the above-referenced facility, located on the Prologis Ports Jersey City Distribution Center Site. This Report was prepared for the 1st semi-annual 2017 sampling event.

Samples were collected on May 26, 2017 from five (5) emission points for the semi-annual sampling event. Samples were analyzed for methane gas as required by the above-referenced Permit.

Please note that the facility at the Site is required to be sampled twice in the first quarter, once per quarter for the next three quarters and semi-annually thereafter. We will submit the reports for these sampling events as soon as the results become available.

If you have any questions or need additional information, please do not hesitate to contact me at 609-826-9600, extension 120, or by email at lchibani@sadat.com.

Sincerely yours,

SADAT ASSOCIATES, INC.

Lahbib Chibani, Ph.D., P.E.
President

Enclosure

cc: Janet Frentzel, Prologis (w/ encl.); via email
Steve Campbell, Prologis (w/encl.); via email
Frank Ryan, Prologis (w/ encl.); via email
Stephie Palm, Prologis (w/ encl.); via email

K:\AMB - Pulaski Distribution Center (PJP)\Emission Testing & Reporting\1st 2017

ENVIRONMENTAL LABORATORIES INCORPORATED
57 Verdi Street, Farmingdale, NY 11735-5637 • Tel: (631) 420-1866 • Fax: (631) 420-1767

June 21, 2017

Mr. Khaled Benslimane
Sadat Associates, Inc.
1545 Lamberton Road
Trenton, NJ 08610

Via Email: KBenslimane@Sadat.com

REF: AMB PULASKI
AIR SAMPLING TEST REPORT – MAY 2017

Dear Mr. Benslimane:

Accompanying this letter of transmittal is the test report concerning the sampling conducted at the above referenced site on May 26, 2017.

Should you require any additional information or clarifications, please contact my office directly.

Very truly yours,

ENVIRONMENTAL LABORATORIES INC.

Henry Hontoria
Senior Field Test Engineer/QSTi

HH/jc

enc. Test Report

AMB PULASKI

AIR SAMPLING AND ANALYSIS PROGRAM TEST REPORT

PERFORMED BY:	**ENVIRONMENTAL LABORATORIES INC.** **57 VERDI STREET** **FARMINGDALE, NEW YORK 11735**
PREPARED FOR:	**SADAT ASSOCIATES, INC.** **TRENTON, NJ**
TEST DATE:	**MAY 26, 2017**
REPORT DATE:	**JUNE 22, 2017**

TABLE OF CONTENTS

1.0 INTRODUCTION AND GENERAL COMMENTS

To quantify the emissions from the landfill gas migration control system at Prologis, an Air Sampling and Analysis Program was performed. Testing was specifically performed at each gas migration Blower System located at various buildings within the site.

The sample locations for this sampling program included:

- Exterior Site (1); and,
- Roof of Building (4)

Field testing was performed on May 26, 2017. Field tests included volumetric flow determination using a hot wire anemometer. Samples of the Migration Control System blowers was performed via EPA TO-15 utilizing an evacuated sampling canister with subsequent sample analysis for methane by enhanced GC/MS

2.0 TEST METHODS SUMMARY

For the emission point, the following procedures were followed:

- The blower was checked for proper operation;
- 3/8"hole was drilled in each duct at least 8'0" downstream and 2'0" upstream of any curve or bend in the duct;
- Sample ports were cleaned for sample acquisition;
- An excavated Summa canister with a thirty (30)-minute regulator was attached to the sample port as to passively sample the effluent for thirty (30) minutes. Velocity measurements were made using an air hot wire velocity meter;
- Each duct diameter and internal effluent stream temperature monitoring was performed;
- At the termination of sample period, the Summa canister regulator was closed and the samples secured for shipment to MaXXam Analytics, Inc. (CANA-001), Ontario, Canada for analysis; and,
- Laboratory analysis for methane was performed by enhanced GC/FID.

3.0 RESULTS SUMMARY

Table 3-1 presents a summary of the methane analytical test results and emission rates.

Table 3-1
AMB PULASKI DIST. CENTER / PROLOGIS

SUMMARY OF TEST RESULTS - May 26, 2017
METHANE RESULTS

Parameter	PROLOGIS				
	1	2	3	4	5
Conc. ppm$_{vd}$					
Methane	310	320	490	490	4000
Emission Rate, lb/hr (1)					
Methane	0.851	0.870	1.877	1.833	8.453

(1) Emission is lb/hr calculated as Methane
ND = Non Detect, emission rate calculated at analytical detection limit.
<- indicates less than results reported at analytical limit of detection.

APPENDIX A

ELI QA/QC PROGRAM

APPENDIX A – QUALITY ASSURANCE PROGRAM SUMMARY

Environmental Laboratories Inc.'s (ELI) Quality Assurance Program is designed to ensure that all source testing methods are followed and are performed by competent, experienced personnel. ELI's sampling equipment is properly calibrated and maintained in good working order. Procedures for sample collection, recovery, and analysis are performed according to applicable EPA 40 CFR Part 60, Appendix A Reference Methods (EPA Method). ELI's quality assurance practices conform to the procedures and practices in the Environmental Protection Agency (EPA) "Quality Assurance handbook for Air Pollution Measurement Systems, Volume III, Stationary Source-Specific Methods", EPA/600/R-941038c and EPA's Emissions Measurement Center (EMC) Approved Alternative Methods. These documents serve as the basis for performance of all testing and related work activities for ELI's emission test programs.

A.1 Equipment Calibrations

One of the most important aspects of pre-sampling preparations is the inspection and calibration of all equipment planned to be used for the field effort. Equipment is inspected for proper operation and durability prior to calibration. Equipment calibration is performed in accordance with EPA guidelines and/or manufacturer's recommendations. Documentation of all calibration records will be kept in the project file during the field program and will be available for inspection by test observers.

A1.1 Calibration procedures and requirements have been specified for all equipment used to make emission measurements, such as:

- Dry Gas Meters (Meter Box);
- Pitot;
- Thermocouples and T/C Read-Outs;
- Balances;
- Barometers;
- Nozzles;
- Instrumental Analyzers; and,
- Chain-of-Custody (COC).

Table B-1 outlines the general requirements for the calibration of source testing equipment. Table B-2 presents specific maintenance procedures for sampling equipment.

A summary of each equipment/component QA/QC is presented below:

A. Meter Box Calibrations and Calibration Checks (see EPA Method 5):

- Initial or Annual – Calibration of DGM with Wet Test Meter or Spirometer at minimum of three (3) orifice settings. Alternately, they maybe calibrated against a secondary reference dry gas meter or critical orfice(s).

- Post-Test – Three (3) point calibration of DGM with Wet Test Meter, critical orifice or secondary reference dry gas meter at intermediate orifice setting from prior test.

- EMC's ALT-009 – Checks Y QA value for each test run. Average of three (3) runs must be less then 5%, if not, do Post Test Calibration.

TABLE A-1
SAMPLING INSTRUMENTS AND EQUIPMENT CALIBRATION SCHEDULE

Instrument Type	Frequency of Calibration	Standard of Comparison or Method of Calibration	Acceptance Limits
Orifice Meter (large)	12 months	Calibrated dry test meter	<±2% of volume measured
Dry Gas Meter	12 months or when repaired	Calibrated dry test meter	<± 2% of volume measured Yi ≤2% from Yavg or ± 0.02 from Avg. ΔH@ ±0.20 from Avg.
	Post Test	After each test program	Ypost ≤5% from Y; EPA ALT 009
S-Type Pitot (for use with EPA-type sampling train)	12 months	EPA Method 2, Geometric Calibration	Dimensional Criteria
Vacuum Gauges Pressure Gauges	12 months	Manometer	±5% at three readings
Field Barometer	12 months	Mercury barometer or local weather station	±0.1" Hg
Thermocouples	12 months	ASTM mercury thermometer or NIST calibrated thermocouple/potentiometer	±1.5% ° R and EPA's ALT-011 ±2°F
Analytical Balance	12 months (checked prior to each use)	Annual check performed by manufacturer or qualified representative	±0.3 mg of stated weight use of NIST traceable weights
Probe Nozzles	Prior to Use	Nozzle diameter check via micrometer	Range <±0.004 inch for three measurements
Instrumental Analyzers	Depends upon use, frequency and performance	As specified by manufacturers operating manuals, EPA and Reference Methods	Satisfy all limits specified in EPA Reference Methods

TABLE A-2
EQUIPMENT MAINTENANCE SCHEDULE
Based on Manufacturer's Specifications and ELI Experience

Equipment	Performance Requirement	Maintenance Interval	Corrective Action
Pumps	1. Absence of leaks 2. Ability to draw manufacturer required vacuum and flow	Every 500 hours of operation or 6 months, whichever is less	1. Visual inspection 2. Clean 3. Replace worn parts 4. Leak check
Flow Measuring Device	1. Free mechanical movement 2. Absence of malfunction	Every 500 hours of operation or 6 months, whichever is less	1. Visual inspection 2. Clean 3. Calibrate
Sampling Instruments	1. Absence of malfunction 2. Proper response to zero, span gas	As required by the manufacturer	As recommended by manufacturer
Integrated Sampling Tanks	Absence of leaks	Depends on nature of use	1. Steam clean 2. Leak check
Mobile Van Sampling Systems	Absence of leaks	Depends on nature of use	1. Change filters 2. Change gas dryer 3. Leak check 4. Check for system contamination
Sampling Lines	Sample degradation less than 2%	After each test or test series	Blow filtered air through line until dry

B. Pitot Calibration:

- EPA Method 2 includes design specification for Type "S" and standard pitots;
- Calibration procedure in Section 10;
- Physical dimensions and alignment;
- If design specifications are met, the pitot is assigned a "baseline coefficient" value of 0.84;
- Unique I.D. required on each pitot;
- Post-test check inspection for damage; and,
- Pre- and post-test leak test.

C. Thermocouples and T/C Readouts:

- Digital thermocouple displays are calibrated using a thermocouple simulator traceable to NIST having a range of 0-2,400°F;
- Thermocouple calibration within temperature baths – ice bath, boiling water and heated oil. Temperature sensor calibration over the expected range of use against ASTMC 3C mercury-in-glass thermometer or NIST traceable thermocouple;
- Within 1.5% of absolute temperature;
- EMC's ALT-011 for post-test (±2°F allowable Diff.) – stack thermocouple single point calibration check; and,
- Thermocouple calibration check of stack temperature, dry gas meter and impinger outlet.

D. Balances:

- Analytical balances are serviced annually by manufacturer or manufacturers designated representative;
- Prior to use, perform Scale Accuracy Test with NIST traceable weights, observed weight ≤0.3 mg diff.; and,
- Check field balances with known weight.

E. **Barometers:**

- Aneroid barometers which are calibrated against barometer pressure reported by a nearby National Weather Service Station; and,
- Barometric pressure reported by a nearby National Weather Service Station and adjusted for stack height (sample location).

F. **Nozzles:**

- EPA Method 5 Section 10.1 calibration procedure;
- Micrometer – average of triplicate measurements;
- Measure to 0.025 mm (0.001 in.); difference between high and low not to exceed 0.004 in.;
- Inspection prior to use for damage, nicks, dents and shape; and,
- Unique I.D. on each nozzle.

G. **Instrumental Analyzers:**

- Analyzers for Gaseous Criteria Pollutants;
- EPA Methods specify calibration procedure;
- Calibration gases for instrumental analyzers should meet the requirements in the "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards" September 1997, as amended August 25, 1999, EPA 600/R-97/121 or more recent update. ELI uses RATA-class calibration gases for all emission testing projects which are certified as EPA Protocol gases;
- Calibration assessment of the analyzers are performed by directing Protocol gas directly to the analyzers to determine calibration error; criteria ±2.0% of span or 0.5 ppm difference;
- Sample System Audit is performed before and after each test run by directing calibration gas to the probe and through the sampling system to the instrumental analyzers. System Bias Criteria ±5% or 0.5 ppm difference. System Drift Criteria ±3% or 0.5 ppm difference;

- EPA Method 7E requirements, perform analyzer Calibration Error Check, and System Bias/Drift Checks. Perform minimum daily NO_2 to NO Converter Check; Acceptance Criteria of ≥90% utilizing NO_2 gas or the Alternative Conversion Efficiency Check ≤2.0%;

- Use of EPA Protocol Gases:

  - Low Level Gas – less than 20% of Span (may be a zero gas);
  - Mid Level Gas – 40% to 60% of Span gas; and,
  - High Level or Span gas.

- Run average value must not exceed Span gas value, and be greater then 20% of Span.

H. Chain-of-Custody

- To prevent losses, mix-ups, contamination, tampering and to document the sample train recovery;

- Complete list of project samples;

- Prepared in field during or after sample train recovery;

- Document each sample train fraction;

- Provide analytical instruction for laboratory analysis; and,

- Document who handles the samples from sample recovery to sample receiver at laboratory.

APPENDIX B

FIELD DATA SHEETS AND LABORATORY CHAIN-OF-CUSTODY

Field Data Sheet

Location:	Prologis Distribution Center	Bar Pres in Hg:	26.59
Job No.	2378	Notes:	
Date:	5/26/2017		
Operator(s):	H. Hontoria		

Sampling Location	Regulator ID	Canister ID	Start			Duct			End		
			Time (hh:mm)	Vaccum (inches Hg.)	Ambient Temp (°F)	Diameter (inches)	Temp (°F)	Flow FPM / Δp	Time (hh:mm)	Vaccum (inches Hg.)	Ambient Temp (°F)
Prologis 1	FX0486	122	6:11	29	56.1	10"	61.1	2280	6:41	11	56.9
Prologis 2	FX0131	7814	6:12	29	56.3	10"	62.6	2263	6:42	11	56.9
Prologis 3	FX0311	14238	6:13	29	56.5	10"	62.3	3186	6:43	11	57.0
Prologis 4	FX1059	7821	6:14	29	56.4	10"	67.4	3144	6:44	11	57.3
Prologis 5	FX0311	23729	6:15	29	57.4	5"	81.5	7292	6:45	11	58.1
Blank	FX0131	17193	7:09	29	57.4	N/A	N/A	N/A	7:39	11	58.1

Chain of Custody Form - Ambient

30-May-17 23:30
Marnela Sim
B7B1544
J L AIR-001

Maxxam Analytics, Inc.
BRL FCD-00089/1

Page 1 of 2

Maxxam Analytics Inc
5555 N. Service Road
Burlington, Ontario L7L 5H7
www.maxxamanalytics.com
Toll Free: 1-800-€
Phone: (905) 3
Fax: (905) 3

CLIENT INFORMATION SECTION

Company Name: Environmental Labs Inc.
Project Manager: Robert O'Connor
e-mail: bob@environmentallabs.com
Address: 57 Verdi Street
Farmingdale, NY 11735
Phone: 631 420.1866 Fax:
Sampled by: H. Hontoria

ANALYSIS REQUESTED

[redacted]	Field Sample ID	Canister Serial #	Field Regulator Serial #	Collection Time	Collection Date	EPA MOD 3C /25A CH4			Start Pressure	End Pressure	Sub Slab	Soil Vapor				Not Used
[redacted]	Prologis 1	122	FX0466	6:41	5/26/2017	x			29	11	x	x				
[redacted]	Prologis 2	7814	FX0131	6:42	5/26/2017	x			29	11	x	x				
[redacted]	Prologis 3	14238	FX0311	6:43	5/26/2017	x			29	11	x	x				
[redacted]	Prologis 4	7821	FX1059	6:44	5/26/2017	x			29	11	x	x				
[redacted]	Prologis 5	23729	FX0311	6:45	5/26/2017	x			29	11	x	x				
[redacted]	Blank	17193	FX0131	7:39	5/26/2017	x			29	11	x	x				
[redacted]																
[redacted]																
[redacted]																
[redacted]	Not Used	18247														x
[redacted]	Not Used	14941														x
[redacted]																
[redacted]																
[redacted]																

TAT Requirement
- STD 10 Business day ☒
- Rush 5 Business day ☐
- Rush 2 Business day ☐
- Rush 1 Business day ☐
- Other (specify):

PROJECT INFORMATION
Project #: 2378
Name: Sadat
PO #:
Maxxam Quote #:
Maxxam Contact:

REPORTING REQUIREMENTS
- Summary Report only ☐
- Summary Report & Full Data Package ☐
- EDD ☒

PROJECT SPECIFIC COMMENTS
(1) NJDEP Level 3 Data Pack
(2) Provide all raw data, certs and accreditations
(3) Report in µg/m3

Client Signature: [signature]
Affiliation: Environmental Labs Inc
Date/Time: 5/26/2017 13 09

Received by: Gerrelic
Affiliation: GEI
Date/Time: 5-1/17 5|30 ~~2~~ ~~11:30~~ 23:30

APPENDIX C

METHANE SUMMARY AND CALCULATIONS

Environmental Laboratories Inc
Client Project #: 2318
Project name: AMB PULASKI DIST. CENTER / PROLOGIS

RESULTS OF ANALYSES OF AIR

Sampling Date		5/26/2017		5/26/2017		5/26/2017		5/26/2017		5/26/2017		5/26/2017	
	Units	BLANK	RDL	PROLOGIS 1	RDL	PROLOGIS 2	RDL	PROLOGIS 3	RDL	PROLOGIS 4	RDL	PROLOGIS 5	RDL
Gas													
Methane	ppm	4.7	3.8	310	4.2	320	4.1	490	4	490	3.9	4000	3.9
Pressure on Receipt	psig	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Exhaust Duct Flow	scfm	n/a		1098.6		1087.3		1532.7		1496.9		845.3	
Methane	lb/hr	n/a		8.51E-01		8.70E-01		1.88E+00		1.83E+00		8.45E+00	

RDL = Reportable Detection Limit
EDL = Estimated Detection Limit
QC Batch = Quality Control Batch

AMB Pulaski

FLOW SUMMARY SHEET

LOCATION: AMB PULASKI DIST. CENTER / PROLOGIS

DATE:	05/26/17	05/26/17	05/26/17	05/26/17	05/26/17
LOCATION:	PROLOGIS 1 Roof*	PROLOGIS 2 Roof*	PROLOGIS 3 Roof*	PROLOGIS 4 Roof*	PROLOGIS 5 Exterior
Pitot Tube Coefficient	1.00	1.00	1.00	1.00	1.00
Duct Diameter, Ds (in)	10.0	10.0	10.0	10.0	5.0
Barometric Pressure, Pbar (in Hg)	26.59	26.59	26.59	26.59	26.59
Stack Pressure, Ps (in Hg)	0.020	0.020	0.020	0.020	0.020
%CO2	0.0	0.0	0.0	0.0	0.0
%O2	20.9	20.9	20.9	20.9	20.9
%CO	0.0	0.0	0.0	0.0	0.0
%N2	79.1	79.1	79.1	79.1	79.1
Avg. Stack temp., Ts (deg F)	61.10	62.6	62.3	67.4	81.5
Absolute Pressure, P (in Hg)	26.61	26.61	26.61	26.61	26.61
Stack Moisture Content, Bws (%)	2.0	2.0	2.0	2.0	2.0
Dry Molecular Weight, Md (lb/lbmole)	28.84	28.84	28.84	28.84	28.84
Stack Molecular Weight, Ms (lb/lbmole)	28.62	28.62	28.62	28.62	28.62
Avg. Stack Velocity, Vsavg (fps)	38.00	37.72	53.13	52.40	121.53
Avg. Stack Velocity, Vsavg (fpm)	2280	2263	3188	3144	7292
Stack Gas Flow Rate, Qsa (acfm)	1244	1235	1739	1715	995
Stack Gas Flow Rate, Qsa (scfm, wet)	1121.1	1109.5	1563.9	1527.4	862.6
Stack Gas Flow Rate, Qsa (scfm, dry)	1098.6	1087.3	1532.7	1496.9	845.3

* Unit Number 1 is closest to the river, Unit 4 is closest to the road.

APPENDIX D

MAXXAM ANALYTICAL DATA REPORTING

Maxxam
A Bureau Veritas Group Company

Your Project #: 2378
Site Location: SADAT
Your C.O.C. #: na

Attention:Robert O'Connor
Environmental Laboratories Inc
57 Verdi St
Farmingdale, NY
USA 11735-5637

Report Date: 2017/06/14
Report #: R4523622
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7B1544
Received: 2017/05/30, 23:30

Sample Matrix: AIR
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Light Hydrocarbons	6	N/A	2017/06/13	CAM SOP-00204	GC/FID

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffi nods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key M Sim Marinela Sim
Project Manager
14 Jun 2017 13:57:50

Please direct all questior ate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: MSim@maxxam.ca
Phone# (905) 817-5700
==
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B7B1544
Report Date: 2017/06/14

Environmental Laboratories Inc
Client Project #: 2378
Site Location: SADAT

RESULTS OF ANALYSES OF AIR

Maxxam ID		EMA920		EMA921		EMA922	EMA923		
Sampling Date		2017/05/26 06:41		2017/05/26 06:42		2017/05/26 06:43	2017/05/26 06:44		
COC Number		na		na		na	na		
	UNITS	PROLOGIS 1 / 122	RDL	PROLOGIS 2 / 7814	RDL	PROLOGIS 3 / 14238	PROLOGIS 4 / 7821	RDL	QC Batch
Methane	ppm	310	4.2	320	4.1	490	490	4	5026004

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		EMA924		EMA925		
Sampling Date		2017/05/26 06:45		2017/05/26 07:39		
COC Number		na		na		
	UNITS	PROLOGIS 5 / 23729	RDL	BLANK / 17193	RDL	QC Batch
Methane	ppm	4000	3.9	4.7	3.8	5026004

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax (905) 817 5777 www.maxxam.ca

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B7B1544
Report Date: 2017/06/14

Environmental Laboratories Inc
Client Project #: 2378
Site Location: SADAT

GENERAL COMMENTS

Light Hydrocarbons Analysis: Canisters were pressurized with Helium to enable sampling. Results and DLs adjusted accordingly.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B7B1544
Report Date: 2017/06/14

Environmental Laboratories Inc
Client Project #: 2378
Site Location: SADAT

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
5026004	SB1	Method Blank	Methane	2017/06/13	ND,RDL=2		ppm	
5026004	SB1	RPD	Methane	2017/06/13	0.40		%	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Tom Mitchell, B.Sc, Supervisor, Compressed Gases

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

A Partner to Clients
with Environmental Needs

February 14, 2018

Ms. Vanessa Day
Chief, NJDEP Bureau of Compliance and Enforcement - Northern
7 Ridgedale Avenue
Cedar Knolls, New Jersey 07927

Re: **2nd 2017 Air Emissions Sampling Report**
Prologis Ports Jersey City Distribution Center, Jersey City, NJ
Facility ID No.: 12777, PCP080001

Dear Ms. Day:

On behalf of Prologis, L.P., Sadat Associates, Inc. is submitting the 2nd 2017 Air Emissions Sampling Report for the Prologis Ports Jersey City Distribution Center located in Jersey City, New Jersey. Sampling of the facility is required on a semiannual basis, and the reports for these sampling events are submitted as the results become available. This 2nd 2017 Air Emissions Sampling Report was prepared by Environmental Laboratories, Inc., in compliance with the conditions of "U1 Protective Methane Venting System and Exhaust Venting System – OS Summary" of the "Facility Specific Requirements."

Also enclosed is a drawing showing the sampling locations and a table of the 2017 emissions calculations. These calculations are derived from the 1st and 2nd 2017 Air Emissions Sampling Reports, and are based on operational hours of the blowers. Please note that four of the five blowers are not operating on a continuous basis. Three blowers operate for 16 hours per day, and one blower operates for twelve 12 hours per day. The attached table also shows when the blowers were not operational during 2017.

Samples were collected on December 19, 2017, from five emission points for the semiannual sampling event. Samples were analyzed for methane gas as required. Based on the sampling analyses and the attached emissions calculations, the facility is in compliance with the permit requirements.

If you have any questions or need additional information, please do not hesitate to contact me at 609-826-9600, extension 120, or by email at lchibani@sadat.com.

Sincerely yours,
SADAT ASSOCIATES, INC.

Lahbib Chibani, Ph.D., P.E.
President

Enclosure
cc: Janet Frentzel, Prologis (w/encl.), via email
Steve Campbell, Prologis (w/encl.), via email
Frank Ryan, Prologis (w/encl.), via email
Stephie Palm, Prologis (w/encl.), via email

ENVIRONMENTAL LABORATORIES INCORPORATED

57 Verdi Street, Farmingdale, NY 11735-5637 • Tel: (631) 420-1866 • Fax: (631) 420-1767

January 15, 2018

Mr. Khaled Benslimane
Sadat Associates, Inc.
1545 Lamberton Road
Trenton, NJ 08610

Via Email: KBenslimane@Sadat.com

REF: PROLOGIS DISTRIBUTION CENTER
AIR SAMPLING TEST REPORT – DECEMBER 2017

Dear Mr. Benslimane,

Accompanying this letter of transmittal is the test report concerning the sampling conducted at the above referenced site on December 19th, 2017.

Should you require any additional information or clarifications, please contact my office directly, 631.420.1866 (x26)\ henry@environmentallabs.com.

Very truly yours,

ENVIRONMENTAL LABORATORIES INC.

Henry Hontoria
Technical Manager, QSTi

HH:dk

enc. Test Report

PROLOGIS DISTRIBUTION CENTER

AIR SAMPLING AND ANALYSIS PROGRAM TEST REPORT

PERFORMED BY: ENVIRONMENTAL LABORATORIES INC.
57 VERDI STREET
FARMINGDALE, NEW YORK 11735

PREPARED FOR: SADAT ASSOCIATES, INC.
TRENTON, NJ

TEST DATE: DECEMBER 19, 2017

REPORT DATE: JANUARY 15, 2018

TABLE OF CONTENTS

APPENDIX

1.0 INTRODUCTION AND GENERAL COMMENTS

To quantify the emissions from the landfill gas migration control system at Prologis, an Air Sampling and Analysis Program was performed. Testing was specifically performed at each gas migration Blower System located at various buildings within the site.

The sample locations for this sampling program included:

- Exterior Site (1); and,
- Roof of Building (4)

Field testing was performed on December 19, 2017. Field tests included volumetric flow determination using a hot wire anemometer. Samples of the Migration Control System blowers was performed via EPA TO-15 utilizing an evacuated sampling canister with subsequent sample analysis for methane by enhanced GC/MS

2.0 TEST METHODS SUMMARY

For the emission point, the following procedures were followed:

- The blower was checked for proper operation;
- 3/8"hole was drilled in each duct at least 8'0" downstream and 2'0" upstream of any curve or bend in the duct;
- Sample ports were cleaned for sample acquisition;
- An excavated Summa canister with a thirty (30)-minute regulator was attached to the sample port as to passively sample the effluent for thirty (30) minutes. Velocity measurements were made using an air hot wire velocity meter;
- Each duct diameter and internal effluent stream temperature monitoring was performed;
- At the termination of sample period, the Summa canister regulator was closed and the samples secured for shipment to MaXXam Analytics, Inc. (CANA-001), Ontario, Canada for analysis; and,
- Laboratory analysis for methane was performed by enhanced GC/FID.

3.0 RESULTS SUMMARY

Table 3-1 presents a summary of the methane analytical test results and emission rates.

Table 3-1
AMB PULASKI DIST. CENTER / PROLOGIS

SUMMARY OF TEST RESULTS - December 19, 2017
METHANE RESULTS

Parameter	PROLOGIS				
	1	2	3	4	5
Conc. ppm$_{vd}$					
Methane	550	660	290	210	8100
Emission Rate, lb/hr (1)					
Methane	1.745	2.034	1.224	1.081	11.414

(1) Emission is lb/hr calculated as Methane

ND = Non Detect, emission rate calculated at analytical detection limit.

<- indicates less than results reported at analytical limit of detection.

APPENDIX A

ELI QA / QC PROGRAM

APPENDIX A – QUALITY ASSURANCE PROGRAM SUMMARY

Environmental Laboratories Inc.'s (ELI) Quality Assurance Program is designed to ensure that all source testing methods are followed and are performed by competent, experienced personnel. ELI's sampling equipment is properly calibrated and maintained in good working order. Procedures for sample collection, recovery, and analysis are performed according to applicable EPA 40 CFR Part 60, Appendix A Reference Methods (EPA Method). ELI's quality assurance practices conform to the procedures and practices in the Environmental Protection Agency (EPA) "Quality Assurance handbook for Air Pollution Measurement Systems, Volume III, Stationary Source-Specific Methods", EPA/600/R-941038c and EPA's Emissions Measurement Center (EMC) Approved Alternative Methods. These documents serve as the basis for performance of all testing and related work activities for ELI's emission test programs.

A.1 Equipment Calibrations

One of the most important aspects of pre-sampling preparations is the inspection and calibration of all equipment planned to be used for the field effort. Equipment is inspected for proper operation and durability prior to calibration. Equipment calibration is performed in accordance with EPA guidelines and/or manufacturer's recommendations. Documentation of all calibration records will be kept in the project file during the field program and will be available for inspection by test observers.

A1.1 Calibration procedures and requirements have been specified for all equipment used to make emission measurements, such as:

- Dry Gas Meters (Meter Box);
- Pitot;
- Thermocouples and T/C Read-Outs;
- Balances;
- Barometers;
- Nozzles;
- Instrumental Analyzers; and,
- Chain-of-Custody (COC).

Table A-1 outlines the general requirements for the calibration of source testing equipment. Table A-2 presents specific maintenance procedures for sampling equipment.

A summary of each equipment/component QA/QC is presented below:

A. <u>Meter Box Calibrations and Calibration Checks (see EPA Method 5):</u>

- Initial or Annual – Calibration of DGM with Wet Test Meter or Spirometer at minimum of three (3) orifice settings. Alternately, they maybe calibrated against a secondary reference dry gas meter or critical orfice(s).

- Post-Test – Three (3) point calibration of DGM with Wet Test Meter, critical orifice or secondary reference dry gas meter at intermediate orifice setting from prior test.

- EMC's ALT-009 – Checks Y QA value for each test run. Average of three (3) runs must be less then 5%, if not, do Post Test Calibration.

TABLE A-1
SAMPLING INSTRUMENTS AND EQUIPMENT CALIBRATION SCHEDULE

Instrument Type	Frequency of Calibration	Standard of Comparison or Method of Calibration	Acceptance Limits
Orifice Meter (large)	12 months	Calibrated dry test meter	<±2% of volume measured
Dry Gas Meter	12 months or when repaired	Calibrated dry test meter	<± 2% of volume measured Yi ≤2% from Yavg or ± 0.02 from Avg. ΔH@ ±0.20 from Avg.
	Post Test	After each test program	Ypost ≤5% from Y; EPA ALT 009
S-Type Pitot (for use with EPA-type sampling train)	12 months	EPA Method 2, Geometric Calibration	Dimensional Criteria
Vacuum Gauges Pressure Gauges	12 months	Manometer	±5% at three readings
Field Barometer	12 months	Mercury barometer or local weather station	±0.1" Hg
Thermocouples	12 months	ASTM mercury thermometer or NIST calibrated thermocouple/potentiometer	±1.5% ° Rand EPA's ALT-011 ±2°F
Analytical Balance	12 months (checked prior to each use)	Annual check performed by manufacturer or qualified representative	±0.3 mg of stated weight use of NIST traceable weights
Probe Nozzles	Prior to Use	Nozzle diameter check via micrometer	Range <±0.004 inch for three measurements
Instrumental Analyzers	Depends upon use, frequency and performance	As specified by manufacturers operating manuals, EPA and Reference Methods	Satisfy all limits specified in EPA Reference Methods

TABLE A-2
EQUIPMENT MAINTENANCE SCHEDULE
Based on Manufacturer's Specifications and ELI Experience

Equipment	Performance Requirement	Maintenance Interval	Corrective Action
Pumps	1. Absence of leaks 2. Ability to draw manufacturer required vacuum and flow	Every 500 hours of operation or 6 months, whichever is less	1. Visual inspection 2. Clean 3. Replace worn parts 4. Leak check
Flow Measuring Device	1. Free mechanical movement 2. Absence of malfunction	Every 500 hours of operation or 6 months, whichever is less	1. Visual inspection 2. Clean 3. Calibrate
Sampling Instruments	1. Absence of malfunction 2. Proper response to zero, span gas	As required by the manufacturer	As recommended by manufacturer
Integrated Sampling Tanks	Absence of leaks	Depends on nature of use	1. Steam clean 2. Leak check
Mobile Van Sampling Systems	Absence of leaks	Depends on nature of use	1. Change filters 2. Change gas dryer 3. Leak check 4. Check for system contamination
Sampling Lines	Sample degradation less than 2%	After each test or test series	Blow filtered air through line until dry

B. Pitot Calibration:

- EPA Method 2 includes design specification for Type "S" and standard pitots;
- Calibration procedure in Section 10;
- Physical dimensions and alignment;
- If design specifications are met, the pitot is assigned a "baseline coefficient" value of 0.84;
- Unique I.D. required on each pitot;
- Post-test check inspection for damage; and,
- Pre- and post-test leak test.

C. Thermocouples and T/C Readouts:

- Digital thermocouple displays are calibrated using a thermocouple simulator traceable to NIST having a range of 0-2,400°F;
- Thermocouple calibration within temperature baths – ice bath, boiling water and heated oil. Temperature sensor calibration over the expected range of use against ASTMC 3C mercury-in-glass thermometer or NIST traceable thermocouple;
- Within 1.5% of absolute temperature;
- EMC's ALT-011 for post-test (±2°F allowable Diff.) – stack thermocouple single point calibration check; and,
- Thermocouple calibration check of stack temperature, dry gas meter and impinger outlet.

D. Balances:

- Analytical balances are serviced annually by manufacturer or manufacturers designated representative;
- Prior to use, perform Scale Accuracy Test with NIST traceable weights, observed weight ≤0.3 mg diff.; and,
- Check field balances with known weight.

E. Barometers:

- Aneroid barometers which are calibrated against barometer pressure reported by a nearby National Weather Service Station; and,

- Barometric pressure reported by a nearby National Weather Service Station and adjusted for stack height (sample location).

F. Nozzles:

- EPA Method 5 Section 10.1 calibration procedure;

- Micrometer – average of triplicate measurements;

- Measure to 0.025 mm (0.001 in.); difference between high and low not to exceed 0.004 in.;

- Inspection prior to use for damage, nicks, dents and shape; and,

- Unique I.D. on each nozzle.

G. Instrumental Analyzers:

- Analyzers for Gaseous Criteria Pollutants;

- EPA Methods specify calibration procedure;

- Calibration gases for instrumental analyzers should meet the requirements in the "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards" September 1997, as amended August 25, 1999, EPA 600/R-97/121 or more recent update. ELI uses RATA-class calibration gases for all emission testing projects which are certified as EPA Protocol gases;

- Calibration assessment of the analyzers are performed by directing Protocol gas directly to the analyzers to determine calibration error; criteria ±2.0% of span or 0.5 ppm difference;

- Sample System Audit is performed before and after each test run by directing calibration gas to the probe and through the sampling system to the instrumental analyzers. System Bias Criteria ±5% or 0.5 ppm difference. System Drift Criteria ±3% or 0.5 ppm difference;

- EPA Method 7E requirements, perform analyzer Calibration Error Check, and System Bias/Drift Checks. Perform minimum daily NO_2 to NO Converter Check; Acceptance Criteria of ≥90% utilizing NO_2 gas or the Alternative Conversion Efficiency Check ≤2.0%;

- Use of EPA Protocol Gases:

  - Low Level Gas – less than 20% of Span (may be a zero gas);
  - Mid Level Gas – 40% to 60% of Span gas; and,
  - High Level or Span gas.

- Run average value must not exceed Span gas value, and be greater then 20% of Span.

H. Chain-of-Custody

- To prevent losses, mix-ups, contamination, tampering and to document the sample train recovery;

- Complete list of project samples;

- Prepared in field during or after sample train recovery;

- Document each sample train fraction;

- Provide analytical instruction for laboratory analysis; and,

- Document who handles the samples from sample recovery to sample receiver at laboratory.

APPENDIX B

FIELD DATA SHEETS
AND
LABORATORY CHAIN OF CUSTODY

TO 15 Field Data Sheet

Location:	**Prologis Distribution Center**	**Bar Pres In Hg:**	29.92
Job No.	**2450**	**Notes:**	
Date:	**12/19/2017**		
Operator(s):	**H. Hontoria / A. Bott / G. Daley**		

Sampling Location	Regulator ID	Canister ID	Start			Duct			End		
			Time (hh:mm)	Vaccum (inches Hg.)	Ambient Temp (°F)	Diameter (inches)	Temp (°F)	Flow FPM / Δp	Time (hh:mm)	Vaccum (inches Hg.)	Ambient Temp (°F)
Prologis 1	FX1417	23746	6:09	29	45.2	10"	47.5	2280	6:39	11	46.4
Prologis 2	FX0507	287	6:10	29	45.3	10"	58.6	2263	6:40	11	46.8
Prologis 3	FX0847	117	6:05	26	45.7	10"	63.3	3128	6:35	8	45.6
Prologis 4	FX0860	14517	6:04	29	45.4	10"	65.5	3832	6:34	11	46.1
Prologis 5	FX0847	14891	7:02	29	52.1	5"	68.1	4215	7:32	11	53.4
Blank	FX0860	14261	7:02	29	52.1	N/A	N/A	N/A	7:32	11	53.4

Chain of Custody Form - Ambient

2379

Maxxam Analytics, Inc
BRL FCD-00089/1

Maxxam
5555 N. Service Road
Burlington, Ontario L7L 5H7
www.maxxamanalytics.com
Toll Free: 1-800-668-0639
Phone: (905) 332-8788
Fax: (905) 332-9169

Page 1 of 1

ANALYSIS REQUESTED

CLIENT INFORMATION SECTION

Company Name: Environmental Labs Inc.
Project Manager: Henry Hontona
e-mail: henry@environmentallabs.com
Address: 57 Verdi Street
Farmingdale, NY 11735
Phone: 631.420.1866 Fax:
Sampled by: A. Bott

MAXXAM use only	Field Sample ID	Canister Serial #	Flow Regulator Serial #	Collection Time	Collection Date	EPA MOD 3C/25A CH4			Start Pressure	End Pressure	Sub Slab	Soil Vapor				Not Used
	Prologis 1	23746	FX1417	6:39	12/19/2017	x			29	11	x	x				
	Prologis 2	287	FX0507	6:40	12/19/2017	x			29	11	x	x				
	Prologis 3	117	FX0847	6:35	12/19/2017	x			26	8	x	x				
	Prologis 4	14517	FX0860	6:34	12/19/2017	x			29	11	x	x				
	Prologis 5	14891	FX0947	7:32	12/19/2017	x			29	11	x	x				
	Blank	14261	FX0860	7:32	12/19/2017	x			29	11	x	x				
	Not Used	14071														x

TAT Requirement
STD 10 Business day
Rush 5 Business day
Rush 2 Business day
Rush 1 Business day
Other (specify)

PROJECT INFORMATION
Project #: 2450
Name: Sadat
PO #:
Maxxam Quote #
Maxxam Contact

REPORTING REQUIREMENTS
Summary Report only
Summary Report & Full Data Package
EDD

PROJECT SPECIFIC COMMENTS
(1) NJDEP Level 3 Data P...
(2) Provide all raw data c...
(3) Report in µg/m3

27-Dec-17 17:30
Marinela Sim
B7T1916
TK1 AIR-001

Client Signature:
Affiliation: Environmental Labs Inc.
Date/Time: 12/19/2017 13:33

Received by:
Affiliation: MAXXAM
Date/Time: 12/22/2017 9:30

2017/12/23 17:30 ... #469333

APPENDIX C

METHANA SUMMARY AND CALCULATIONS

AMB Pulaski

FLOW SUMMARY SHEET

LOCATION: AMB PULASKI DIST. CENTER / PROLOGIS

DATE:	12/19/17	12/19/17	12/19/17	12/19/17	12/19/17
LOCATION:	PROLOGIS 1 Roof*	PROLOGIS 2 Roof*	PROLOGIS 3 Roof*	PROLOGIS 5 Roof*	PROLOGIS 5 Exterior
Pitot Tube Coeffiecient	1.00	1.00	1.00	1.00	1.00
Duct Diameter, Ds (in)	10.0	10.0	10.0	10.0	5.0
Barometric Pressure, Pbar (in Hg)	29.92	29.92	29.92	29.92	29.92
Stack Pressure, Ps (in Hg)	0.020	0.020	0.020	0.020	0.020
%CO2	0.0	0.0	0.0	0.0	0.0
%O2	20.9	20.9	20.9	20.9	20.9
%CO	0.0	0.0	0.0	0.0	0.0
%N2	79.1	79.1	79.1	79.1	79.1
Avg. Stack temp., Ts (deg F)	47.50	58.6	63.3	65.5	68.1
Absolute Pressure, P (in Hg)	29.94	29.94	29.94	29.94	29.94
Stack Moisture Content, Bws (%)	2.0	2.0	2.0	2.0	2.0
Dry Molecular Weight, Md (lb/lbmole)	28.84	28.84	28.84	28.84	28.84
Stack Molecular Weight, Ms (lb/lbmole)	28.62	28.62	28.62	28.62	28.62
Avg. Stack Velocity, Vsavg (fps)	38.00	37.72	52.13	63.87	70.25
Avg. Stack Velocity, Vsavg (fpm)	2280	2263	3128	3832	4215
Stack Gas Flow Rate, Qsa (acfm)	1244	1235	1707	2091	575
Stack Gas Flow Rate, Qsa (scfm, wet)	1295.2	1258.0	1723.2	2102.2	575.2
Stack Gas Flow Rate, Qsa (scfm, dry)	**1269.3**	**1232.8**	**1688.8**	**2060.2**	**563.7**

* Unit Number 1 is closest to the river, Unit 4 is closest to the road.

Environmental Laboratories Inc
Client Project #: 2450
Project name: AMB PULASKI DIST. CENTER / PROLOGIS

RESULTS OF ANALYSES OF AIR

Sampling Date		12/19/2017		12/19/2017		12/19/2017		12/19/2017		12/19/2017		12/19/2017	
	Units	BLANK	RDL	PROLOGIS 1	RDL	PROLOGIS 2	RDL	PROLOGIS 3	RDL	PROLOGIS 5	RDL	PROLOGIS 5	RDL
Gas													
Methane	ppm	7.6	3.9	550	3.9	660	4.2	290	4.2	210	4.1	8100	3.9
Pressure on Receipt	psig	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Exhaust Duct Flow	scfm	n/a		1269.3		1232.8		1688.8		2060.2		563.7	
Methane	lb/hr	n/a		1.75E+00		2.03E+00		1.22E+00		1.08E+00		1.14E+01	

RDL = Reportable Detection Limit
EDL = Estimated Detection Limit
QC Batch = Quality Control Batch

APPENDIX D

MAXXAM ANALYTICAL DATA REPORTING

Maxxam
A Bureau Veritas Group Company

Your Project #: 2450
Site Location: SADAT
Your C.O.C. #: na

Attention: Henry Hontoria

Environmental Laboratories Inc
57 Verdi St
Farmingdale, NY
USA 11735-5637

Report Date: 2018/01/10
Report #: R4933407
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B7T1916
Received: 2017/12/27, 17:30

Sample Matrix: AIR
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Light Hydrocarbons	6	N/A	2018/01/02	CAM SOP-00204	GC/FID

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key M Sim

Marinela Sim
Project Manager
11 Jan 2018 10:10:44

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: MSim@maxxam.ca
Phone# (905) 817-5700

==

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B7T1916
Report Date: 2018/01/10

Environmental Laboratories Inc
Client Project #: 2450
Site Location: SADAT

RESULTS OF ANALYSES OF AIR

Maxxam ID		FVD782	FVD782		FVD783	FVD784		FVD785		FVD786		
Sampling Date		2017/12/19 06:39	2017/12/19 06:39		2017/12/19 06:40	2017/12/19 06:35		2017/12/19 06:34		2017/12/19 07:32		
COC Number		na	na		na	na		na		na		
	UNITS	**PROLOGIS 1**	**PROLOGIS 1 Lab-Dup**	**RDL**	**PROLOGIS 2**	**PROLOGIS 3**	**RDL**	**PROLOGIS 4**	**RDL**	**PROLOGIS 5**	**RDL**	**QC Batch**
Methane	ppm	550	560	3.9	660	290	4.2	210	4.1	8100	3.9	5336686

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		FVD787		
Sampling Date		2017/12/19 07:32		
COC Number		na		
	UNITS	**BLANK**	**RDL**	**QC Batch**
Methane	ppm	7.6	3.9	5336686

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B7T1916
Report Date: 2018/01/10

Environmental Laboratories Inc
Client Project #: 2450
Site Location: SADAT

TEST SUMMARY

Maxxam ID: FVD782
Sample ID: PROLOGIS 1
Matrix: AIR

Collected: 2017/12/19
Shipped:
Received: 2017/12/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Light Hydrocarbons	GC/FID	5336686	N/A	2018/01/02	Shilpa Kataria

Maxxam ID: FVD782 Dup
Sample ID: PROLOGIS 1
Matrix: AIR

Collected: 2017/12/19
Shipped:
Received: 2017/12/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Light Hydrocarbons	GC/FID	5336686	N/A	2018/01/02	Shilpa Kataria

Maxxam ID: FVD783
Sample ID: PROLOGIS 2
Matrix: AIR

Collected: 2017/12/19
Shipped:
Received: 2017/12/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Light Hydrocarbons	GC/FID	5336686	N/A	2018/01/02	Shilpa Kataria

Maxxam ID: FVD784
Sample ID: PROLOGIS 3
Matrix: AIR

Collected: 2017/12/19
Shipped:
Received: 2017/12/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Light Hydrocarbons	GC/FID	5336686	N/A	2018/01/02	Shilpa Kataria

Maxxam ID: FVD785
Sample ID: PROLOGIS 4
Matrix: AIR

Collected: 2017/12/19
Shipped:
Received: 2017/12/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Light Hydrocarbons	GC/FID	5336686	N/A	2018/01/02	Shilpa Kataria

Maxxam ID: FVD786
Sample ID: PROLOGIS 5
Matrix: AIR

Collected: 2017/12/19
Shipped:
Received: 2017/12/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Light Hydrocarbons	GC/FID	5336686	N/A	2018/01/02	Shilpa Kataria

Maxxam ID: FVD787
Sample ID: BLANK
Matrix: AIR

Collected: 2017/12/19
Shipped:
Received: 2017/12/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Light Hydrocarbons	GC/FID	5336686	N/A	2018/01/02	Shilpa Kataria

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

GENERAL COMMENTS

Sample FVD782 [PROLOGIS 1] : FVD782 : 361,000 µg/m³
FVD782-D : 368,000 µg/m³

Sample FVD783 [PROLOGIS 2] : FVD783 : 431,000 µg/m³

Sample FVD784 [PROLOGIS 3] : FVD784 : 188,000 µg/m³

Sample FVD785 [PROLOGIS 4] : FVD785 : 140,000 µg/m³

Sample FVD786 [PROLOGIS 5] : FVD786 : 5,330,000 µg/m³

Sample FVD787 [BLANK] : FVD787 : 5000 µg/m³

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
5336686	SKT	Method Blank	Methane	2018/01/02	ND,RDL=2		ppm	
5336686	SKT	RPD [FVD782-01]	Methane	2018/01/02	1.9		%	30

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B7T1916
Report Date: 2018/01/10

Environmental Laboratories Inc
Client Project #: 2450
Site Location: SADAT

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Tom Mitchell, B.Sc, Supervisor, Compressed Gases

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

LEGEND

— · — · —	PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER SITE BOUNDARY
o	BLOWER LOCATIONS
▭	BUILDING LOCATION

REV. NO.	DATE	REMARKS

Lahbib Chibani, Ph.D., P.E.
Professional Engineering License No. 37055

SADAT ASSOCIATES INC.
ENGINEERING & ENVIRONMENTAL SCIENCE
1545 LAMBERTON ROAD, TRENTON NJ 08611
(609) 826-9600 FAX (609) 826-9601

OWNER
AMB PULASKI DISTRIBUTION CENTER LLC
EAST RUTHERFORD, NJ

AUTOCAD PATH
G:\PJP landfill\2014 as-built

DESIGN BY JG	CHECKED BY	CERTIFICATE OF AUTHORIZATION NO. 24GA28015200
PROJ MGR LC	STATUS (P) PRELIM (F) FINAL (C) CONSTRUCTION (D) AS-BUILT	
DRAWN BY PAB	DRAWING TITLE PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER BLOWER LOCATIONS	
DATE 7/11/2017		
SCALE 1"=80'		
JOB NO 06053	DRAWING NO.	SHEET 1 OF 1 — REV.

G:\PJP landfill\2014 As-Built\BLOWER LOCATIONS.dwg, 7/11/2017 3:53:35 PM

Calculated 2017 Annual Emissions for Prologis Facility ID: 1277 PCP080001

First Semi-Annual 2017 Calculations

Prologis Facility ID: 1277 PCP080001 - Lab Readings from May 26, 2017 Sampling Event (found in ELI Lab Report) (lb/hr)

Blower No.	1	2	3	4	5
Emissions (lb/hr)	0.851	0.87	1.877	1.833	8.453

Estimated Yearly Emissions Based on Blower Daily Operation Time (*)

Blower No.	1	2	3	4	5	Total	Permit Limits	
Daily Operation Time (hr)	16	16	16	12	24			
Number of Working Months (January through June)	4	4	5	3	6			
Emissions (lb/ 6 months)	1,661.15	1,670.40	4,534.83	2,639.52	37,024.14			
Emissions (lb/yr)**	3,322.30	3,340.80	9,069.66	5,279.04	74,048.28	95,060.09	119,100.00	lb/yr
Emissions (tn/yr)						47.53	59.55	tn/yr
Emissions (lb/hr)						10.85	13.60	lb/hr

(*) based on one sampling event conducted on May 26, 2017. ELI Lab Report dated June 21, 2017

(**) per year assumes twice the value from 6 months

Second Semi-Annual 2017 Calculations

Prologis Facility ID: 1277 PCP080001 - Lab Readings from December 19, 2017 Sampling Event (found in ELI Lab Report) (lb/hr)

Blower Number	1	2	3	4	5
Emissions (lb/hr)	1.745	2.034	1.224	1.081	11.414

Estimated Yearly Emissions Based on Blower Daily Operation Time (*)

Blower No.	1	2	3	4	5	Total	Permit Limits	
Daily Operation Time (hr)	16	16	16	12	24			
Number of Working Months (July through December)	6	5	6	4	5			
Emissions (lb/ 6 months)	5,095.40	4,979.23	3,574.08	1,595.56	41,912.21			
Emissions (lb/yr)**	10,190.80	9,958.46	7,148.16	3,191.11	83,824.42	114,312.95	119,100.00	lb/yr
Emissions (tn/yr)						57.16	59.55	tn/yr
Emissions (lb/hr)						13.05	13.60	lb/hr

(*) based on one sampling event conducted on December 19, 2017. ELI Lab Report dated January 15, 2018

(**) per year assumes twice the value from 6 months

Calculated 2017 Annual Emissions for Prologis Facility ID: 1277 PCP080001

Lab Readings Averaged from May 26 and December 19, 2017 Sampling Events (found in ELI Lab Reports) (lb/hr)

Blower Number	1	2	3	4	5
Emissions (lb/hr)	1.298	1.452	1.5505	1.457	9.9335

Estimated Yearly Emissions Based on Blower Daily Operation Time (*)

Blower No.	1	2	3	4	5	Total	Permit Limits	
Daily Operation Time (hr)	16	16	16	12	24			
Number of Working Months (January through December of 2017)	10	9	11	7	11			
Emissions (lb/yr)**	6,756.55	6,649.63	8,108.91	4,235.08	78,936.35	104,686.52	119,100.00	lb/yr
Emissions (tn/yr)						52.34	59.55	tn/yr
Emissions (lb/hr)						11.95	13.60	lb/hr

(*) based on averaged two sampling events conducted on May 26 and December 19, 2017. ELI Lab Reports are dated June 21, 2017 and January 15, 2018, respectively.

(**) adjustments based on operating months for blowers

Monthly Flow (CFM) Readings of Prologis Blowers by SAI

Date	Blower 1	Blower 2	Blower 3	Blower 4	Blower 5
	CFM	CFM	CFM	CFM	CFM
1/25/2017	2540	2829	3043	Off	750
2/27/2017	Off	3130	2730	Off	687
3/24/2017	2335	2977	2332	2670	772
4/18/2017	2789	Off	Off	3130	758
5/23/2017	Off	Off	3036	Off	714
6/13/2017	2636	2978	2562	2893	601
7/26/2017	2618	2861	2515	Off	Off
8/28/2017	2560	2441	2187	2625	776
9/20/2017	2512	2634	2178	2786	771
10/27/2017	2396	2766	2537	2778	787
11/29/2017	2490	2783	2624	Off	792
12/28/2017	2734	Off	2053	2545	710

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

December 13, 2016

Nick Morgan
Sadat Associates
1545 Lamberton Rd.
Trenton, NJ 08610

RE: Project: Prologis RCA
Pace Project No.: 30200676

Dear Nick Morgan:

Enclosed are the analytical results for sample(s) received by the laboratory on October 26, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Revision 1 - This report replaces the November 29, 2016 report. PCBs have been added to the report.

Revision 2 - This report replaces the report of November 29, 2016. Report reissued on December 5, 2016 to include additional qualifiers related to failures in the ICV/CCV associated with sample 002.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette
david.pichette@pacelabs.com
Project Manager

Enclosures

cc: IL Kim, Sadat Associates

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CERTIFICATIONS

Project:	Prologis RCA
Pace Project No.:	30200676

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Long Island Certification IDs

575 Broad Hollow Rd, Melville, NY 11747
New York Certification #: 10478 Primary Accrediting Body
New Jersey Certification #: NY158
Pennsylvania Certification #: 68-00350
Connecticut Certification #: PH-0435
Maryland Certification #: 208
Rhode Island Certification #: LAO00340
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

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SAMPLE SUMMARY

Project: Prologis RCA
Pace Project No.: 30200676

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30200676001	**comp 1**	Solid	10/25/16 08:53	10/26/16 10:30
30200676002	**comp 2**	Solid	10/25/16 08:57	10/26/16 10:30
30200676003	**voc1**	Solid	10/25/16 09:20	10/26/16 10:30
30200676004	**voc2**	Solid	10/25/16 09:12	10/26/16 10:30

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SAMPLE ANALYTE COUNT

Project: Prologis RCA
Pace Project No.: 30200676

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30200676001	**comp 1**	EPA 8081A	CWB	23	PASI-PA
		EPA 8082	SJG	10	PASI-PA
		EPA 8151A	MJM	4	PASI - LI
		EPA 8151A	MJM	4	PASI-LI
		EPA 8151A	MJM	4	PASI-MV
		EPA 8151A	MJM	4	PASI-MVNY
		EPA 6010B	KAS	12	PASI-PA
		EPA 6010B	CTS	7	PASI-PA
		EPA 7470A	PJD	1	PASI-PA
		EPA 7471A	PJD	1	PASI-PA
		EPA 8270C	EAC	85	PASI-PA
		EPA 7196A	CS1	1	PASI-PA
		EPA 9045C	LEP	1	PASI-PA
30200676002	**comp 2**	EPA 8081A	CWB	23	PASI-PA
		EPA 8082	SJG	10	PASI-PA
		EPA 8151A	MJM	4	PASI - LI
		EPA 8151A	MJM	4	PASI-LI
		EPA 8151A	MJM	4	PASI-MV
		EPA 8151A	MJM	4	PASI-MVNY
		EPA 6010B	KAS	12	PASI-PA
		EPA 6010B	CTS	7	PASI-PA
		EPA 7470A	PJD	1	PASI-PA
		EPA 7471A	PJD	1	PASI-PA
		EPA 8270C	EAC	85	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
		EPA 7196A	CS1	1	PASI-PA
		EPA 9045C	LEP	1	PASI-PA
30200676003	**voc1**	EPA 8260B	MAK	106	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA
30200676004	**voc2**	EPA 8260B	MAK	104	PASI-PA
		ASTM D2974-87	SRA	1	PASI-PA

PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8081A**
Description: 8081 GCS Pesticides
Client: Sadat Associates
Date: December 13, 2016

General Information:
2 samples were analyzed for EPA 8081A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 239093

3c: The lower of the two results is reported.
- comp 2 (Lab ID: 30200676002)
  - gamma-Chlordane

4c: The result is reported from the rear analytical column due to a high response for DDE on the front analytical column in the opening and closing calibration standards. The lower of the two results is reported.
- comp 2 (Lab ID: 30200676002)
  - 4,4'-DDE

C3: Relative percent difference between results from each column was greater than 40%. The higher of the two results was reported.
- comp 2 (Lab ID: 30200676002)
  - Endrin aldehyde

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8081A**
Description: 8081 GCS Pesticides
Client: Sadat Associates
Date: December 13, 2016

Analyte Comments:

QC Batch: 239093

C3: Relative percent difference between results from each column was greater than 40%. The higher of the two results was reported.

- comp 2 (Lab ID: 30200676002)
  - Methoxychlor

QC Batch: 239563

4c: The result is reported from the rear analytical column due to a high response for DDE on the front analytical column in the opening and closing calibration standards. The lower of the two results is reported.

- comp 1 (Lab ID: 30200676001)
  - 4,4'-DDE

C3: Relative percent difference between results from each column was greater than 40%. The higher of the two results was reported.

- comp 1 (Lab ID: 30200676001)
  - gamma-Chlordane

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8082**
Description: 8082 GCS PCB
Client: Sadat Associates
Date: December 13, 2016

General Information:
2 samples were analyzed for EPA 8082. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 242303

5c: The result is reported from the rear analytical column due to high response in the closing CCV on the front analytical column. The lower of the two results is reported.

- comp 2 (Lab ID: 30200676002)
  - PCB-1260 (Aroclor 1260)

C2: Relative percent difference between results from each column was greater than 40%. The lower of the two results was reported.

- comp 1 (Lab ID: 30200676001)
  - PCB-1260 (Aroclor 1260)
- comp 2 (Lab ID: 30200676002)
  - PCB-1260 (Aroclor 1260)

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8082**
Description: 8082 GCS PCB
Client: Sadat Associates
Date: December 13, 2016

Analyte Comments:

QC Batch: 242303

C3: Relative percent difference between results from each column was greater than 40%. The higher of the two results was reported.

- comp 1 (Lab ID: 30200676001)
  - PCB-1248 (Aroclor 1248)
- comp 2 (Lab ID: 30200676002)
  - PCB-1248 (Aroclor 1248)

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8151A**
Description: 8151 Chlorinated Herbicides
Client: Sadat Associates
Date: December 13, 2016

General Information:
2 samples were analyzed for EPA 8151A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation conducted outside EPA method holding time.
- comp 1 (Lab ID: 30200676001)
- comp 2 (Lab ID: 30200676002)

Sample Preparation:
The samples were prepared in accordance with EPA 8151A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 3451

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 703922001

R1: RPD value was outside control limits.
- MSD (Lab ID: 17627)
  - 2,4,5-T
  - 2,4,5-TP (Silvex)
  - 2,4-D

Additional Comments:

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 6010B**
Description: 6010 MET ICP
Client: Sadat Associates
Date: December 13, 2016

General Information:
2 samples were analyzed for EPA 6010B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 239343

B: Analyte was detected in the associated method blank.
- BLANK for HBN 239343 [MPRP/196 (Lab ID: 1176481)
  - Selenium

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 239343

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30201416001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 1176484)
  - Antimony

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 6010B**
Description: 6010 MET ICP, TCLP
Client: Sadat Associates
Date: December 13, 2016

General Information:
2 samples were analyzed for EPA 6010B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 239390

B: Analyte was detected in the associated method blank.

- LB for HBN 239295 [TCLP/6608] (Lab ID: 1176357)
    - Arsenic
    - Barium
    - Chromium
    - Lead
    - Selenium
- LB for HBN 239295 [TCLP/6608] (Lab ID: 1176358)
    - Arsenic
    - Barium
    - Chromium
    - Selenium

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 239390

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30200732001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1176627)
    - Selenium

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 6010B**
Description: 6010 MET ICP, TCLP
Client: Sadat Associates
Date: December 13, 2016

QC Batch: 239390

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30200732001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Silver
- MSD (Lab ID: 1176628)
  - Cadmium
  - Selenium
  - Silver

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 7470A**
Description: 7470 Mercury, TCLP
Client: Sadat Associates
Date: December 13, 2016

General Information:
2 samples were analyzed for EPA 7470A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 7471A**
Description: 7471 Mercury
Client: Sadat Associates
Date: December 13, 2016

General Information:
2 samples were analyzed for EPA 7471A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7471A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8270C**
Description: 8270 MSSV FULL LIST MICROWAVE
Client: Sadat Associates
Date: December 13, 2016

General Information:
2 samples were analyzed for EPA 8270C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

QC Batch: 239088

IS: The internal standard response is below criteria. Results may be biased high.

- comp 2 (Lab ID: 30200676002)
  - 3,3'-Dichlorobenzidine
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(k)fluoranthene
  - Butylbenzylphthalate
  - Chrysene
  - Di-n-octylphthalate
  - Dibenz(a,h)anthracene
  - Indeno(1,2,3-cd)pyrene
  - Terphenyl-d14 (S)

QC Batch: 239573

IS: The internal standard response is below criteria. Results may be biased high.

- BLANK (Lab ID: 1177251)
  - Benzidine
- LCS (Lab ID: 1177252)
  - Benzidine
- MS (Lab ID: 1177253)
  - 2,4,6-Tribromophenol (S)
  - 3,3'-Dichlorobenzidine
  - 4,6-Dinitro-2-methylphenol

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8270C**
Description: 8270 MSSV FULL LIST MICROWAVE
Client: Sadat Associates
Date: December 13, 2016

QC Batch: 239573

IS: The internal standard response is below criteria. Results may be biased high.

- 4-Bromophenylphenyl ether
- Anthracene
- Atrazine
- Azobenzene
- Benzidine
- Benzo(a)anthracene
- Benzo(a)pyrene
- Benzo(g,h,i)perylene
- Benzo(k)fluoranthene
- Butylbenzylphthalate
- Carbazole
- Chrysene
- Di-n-butylphthalate
- Dibenz(a,h)anthracene
- Fluoranthene
- Hexachlorobenzene
- Indeno(1,2,3-cd)pyrene
- N-Nitrosodiphenylamine
- Pentachlorophenol
- Phenanthrene
- Terphenyl-d14 (S)

- MSD (Lab ID: 1177254)
  - Benzidine
  - Benzo(a)pyrene
  - Benzo(g,h,i)perylene
  - Benzo(k)fluoranthene
  - Dibenz(a,h)anthracene
  - Indeno(1,2,3-cd)pyrene
- comp 1 (Lab ID: 30200676001)
  - Benzidine
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(k)fluoranthene
  - Di-n-octylphthalate
  - Dibenz(a,h)anthracene
  - Indeno(1,2,3-cd)pyrene

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8270C**
Description: 8270 MSSV FULL LIST MICROWAVE
Client: Sadat Associates
Date: December 13, 2016

QC Batch: 239088

B: Analyte was detected in the associated method blank.

- BLANK for HBN 239088 [OEXT/302 (Lab ID: 1174917)
  - 3&4-Methylphenol(m&p Cresol)
  - Benzaldehyde
  - Butylbenzylphthalate
  - Di-n-butylphthalate

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 239573

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30200676001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1177253)
  - 2,4-Dinitrophenol
  - 4,6-Dinitro-2-methylphenol
  - 4-Nitrophenol
  - Benzidine
  - Benzo(k)fluoranthene
  - Butylbenzylphthalate
  - Hexachlorocyclopentadiene
  - Phenanthrene
- MSD (Lab ID: 1177254)
  - 1,4-Dichlorobenzene
  - 4,6-Dinitro-2-methylphenol
  - Benzidine
  - Benzo(g,h,i)perylene
  - Dibenz(a,h)anthracene
  - Indeno(1,2,3-cd)pyrene

R1: RPD value was outside control limits.

- MSD (Lab ID: 1177254)
  - 3-Nitroaniline
  - 4-Chloroaniline
  - 4-Nitroaniline
  - 4-Nitrophenol
  - Aniline
  - Azobenzene
  - Benzo(b)fluoranthene
  - Chrysene
  - Phenanthrene
  - Pyrene

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8270C**
Description: 8270 MSSV FULL LIST MICROWAVE
Client: Sadat Associates
Date: December 13, 2016

QC Batch: 239573

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30200676001

R1: RPD value was outside control limits.

- bis(2-Ethylhexyl)phthalate

Additional Comments:

Batch Comments:

A matrix spike/matrix spike duplicate was not performed for this batch due to a laboratory error.

- QC Batch: 239088

Analyte Comments:

QC Batch: 239088

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to a laboratory error.

- comp 2 (Lab ID: 30200676002)
  - 1,2,4-Trichlorobenzene
  - 1,2-Dichlorobenzene
  - 1,3-Dichlorobenzene
  - 1,4-Dichlorobenzene
  - 1,2,4,5-Tetrachlorobenzene
  - 1-Methylnaphthalene
  - 2,3,4,6-Tetrachlorophenol
  - 2,4,6-Trichlorophenol
  - 2,4-Dichlorophenol
  - 2,4-Dimethylphenol
  - 2,4-Dinitrophenol
  - 2,4-Dinitrotoluene
  - 2,4,5-Trichlorophenol
  - 2,6-Dinitrotoluene
  - 2-Chloronaphthalene
  - 2-Chlorophenol
  - 2-Methylphenol(o-Cresol)
  - 2-Methylnaphthalene
  - 2-Nitroaniline
  - 2-Nitrophenol
  - 3,3'-Dichlorobenzidine
  - 3&4-Methylphenol(m&p Cresol)
  - 3-Nitroaniline
  - 4,6-Dinitro-2-methylphenol
  - 4-Bromophenylphenyl ether
  - 4-Chloro-3-methylphenol
  - 4-Chloroaniline
  - 4-Chlorophenylphenyl ether
  - 4-Nitroaniline
  - 4-Nitrophenol
  - Acenaphthene

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8270C**
Description: 8270 MSSV FULL LIST MICROWAVE
Client: Sadat Associates
Date: December 13, 2016

Analyte Comments:

QC Batch: 239088

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to a laboratory error.

- comp 2 (Lab ID: 30200676002)
  - Acenaphthylene
  - Acetophenone
  - Aniline
  - Anthracene
  - Atrazine
  - Azobenzene
  - Butylbenzylphthalate
  - Benzoic acid
  - Benzyl alcohol
  - Benzo(k)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(a)anthracene
  - Benzidine
  - Benzo(b)fluoranthene
  - Benzo(a)pyrene
  - Biphenyl (Diphenyl)
  - bis(2-Chloroethoxy)methane
  - bis(2-Chloroethyl) ether
  - bis(2-Chloroisopropyl) ether
  - bis(2-Ethylhexyl)phthalate
  - Benzaldehyde
  - Carbazole
  - Chrysene
  - Caprolactam
  - Dibenz(a,h)anthracene
  - Dibenzofuran
  - Dimethylphthalate
  - Di-n-butylphthalate
  - Di-n-octylphthalate
  - Diethylphthalate
  - Fluorene
  - Fluoranthene
  - Hexachloro-1,3-butadiene
  - Hexachlorobenzene
  - Hexachlorocyclopentadiene
  - Hexachloroethane
  - Indeno(1,2,3-cd)pyrene
  - Isophorone
  - Naphthalene
  - N-Nitroso-di-n-propylamine
  - Nitrobenzene
  - N-Nitrosodimethylamine

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8270C**
Description: 8270 MSSV FULL LIST MICROWAVE
Client: Sadat Associates
Date: December 13, 2016

Analyte Comments:

QC Batch: 239088

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to a laboratory error.

- comp 2 (Lab ID: 30200676002)
  - N-Nitrosodiphenylamine
  - Phenol
  - Phenanthrene
  - Pentachlorophenol
  - Pyrene
  - Pyridine

6c: This analyte was outside the secondary source verification criteria high for the initial calibration. The result is estimated.

- BLANK (Lab ID: 1174917)
  - Benzoic acid
  - Pentachlorophenol
- LCS (Lab ID: 1174918)
  - 2,4-Dinitrophenol
  - 4,6-Dinitro-2-methylphenol
- comp 2 (Lab ID: 30200676002)
  - 2,4-Dinitrophenol
  - 4,6-Dinitro-2-methylphenol

N2: The lab does not hold NELAC/TNI accreditation for this parameter.

- BLANK (Lab ID: 1174917)
  - Azobenzene
- LCS (Lab ID: 1174918)
  - Azobenzene
- comp 2 (Lab ID: 30200676002)
  - Azobenzene

QC Batch: 239573

6c: This analyte was outside the secondary source verification criteria high for the initial calibration. The result is estimated.

- BLANK (Lab ID: 1177251)
  - 2,4-Dinitrophenol
  - 4,6-Dinitro-2-methylphenol
- LCS (Lab ID: 1177252)
  - 2,4-Dinitrophenol
  - 4,6-Dinitro-2-methylphenol
- MS (Lab ID: 1177253)
  - 2,4-Dinitrophenol
  - 4,6-Dinitro-2-methylphenol
- MSD (Lab ID: 1177254)
  - 2,4-Dinitrophenol
  - 4,6-Dinitro-2-methylphenol
- comp 1 (Lab ID: 30200676001)
  - 2,4-Dinitrophenol
  - 4,6-Dinitro-2-methylphenol

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8270C**
Description: 8270 MSSV FULL LIST MICROWAVE
Client: Sadat Associates
Date: December 13, 2016

Analyte Comments:

QC Batch: 239573

N2: The lab does not hold NELAC/TNI accreditation for this parameter.

- BLANK (Lab ID: 1177251)
  - Azobenzene
- LCS (Lab ID: 1177252)
  - Azobenzene
- MS (Lab ID: 1177253)
  - Azobenzene
- MSD (Lab ID: 1177254)
  - Azobenzene
- comp 1 (Lab ID: 30200676001)
  - Azobenzene

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8260B**
Description: 8260B MSV 5035 Low Level
Client: Sadat Associates
Date: December 13, 2016

General Information:
2 samples were analyzed for EPA 8260B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 239554

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1177186)
  - 1,3,5-Trichlorobenzene

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 239554

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8260B**
Description: 8260B MSV 5035 Low Level
Client: Sadat Associates
Date: December 13, 2016

Analyte Comments:

QC Batch: 239554

2c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- voc1 (Lab ID: 30200676003)
  - 1,1-Dichloroethane
  - 1,1-Dichloroethene
  - 1,1-Dichloropropene
  - 1,1,1-Trichloroethane
  - 1,1,2-Trichloroethane
  - 1,1,1,2-Tetrachloroethane
  - 1,1,2,2-Tetrachloroethane
  - 1,2,4-Trichlorobenzene
  - 1,2-Dichlorobenzene
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dichloroethane
  - 1,2-Dibromoethane (EDB)
  - 1,2-Dichloropropane
  - 1,2,4-Trimethylbenzene
  - 1,2,3-Trichlorobenzene
  - 1,2,3-Trichloropropane
  - 1,3,5-Trichlorobenzene
  - 1,3-Dichlorobenzene
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 1,4-Dichlorobenzene
  - 1,4-Dioxane (p-Dioxane)
  - 2,2-Dichloropropane
  - 2-Butanone (MEK)
  - 2-Chlorotoluene
  - 2-Chloroethylvinyl ether
  - 2-Hexanone
  - 2-Methylnaphthalene
  - 2-Nitropropane
  - Allyl chloride
  - 4-Chlorotoluene
  - Carbon disulfide
  - Ethanol
  - Acetone
  - Acrolein
  - Acetonitrile
  - Acrylonitrile
  - Bromochloromethane
  - Benzene
  - Bromobenzene
  - Bromodichloromethane
  - Bromomethane

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8260B**
Description: 8260B MSV 5035 Low Level
Client: Sadat Associates
Date: December 13, 2016

Analyte Comments:

QC Batch: 239554

2c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- voc1 (Lab ID: 30200676003)
  - Bromoform
  - cis-1,2-Dichloroethene
  - cis-1,3-Dichloropropene
  - Carbon tetrachloride
  - Cyclohexane
  - Chlorobenzene
  - Chloroprene
  - Chloroethane
  - Chloroform
  - Chloromethane
  - Cyclohexanone
  - Dibromochloromethane
  - Diethyl ether (Ethyl ether)
  - Dichlorodifluoromethane
  - Diisopropyl ether
  - Dibromomethane
  - Ethyl acetate
  - Ethylbenzene
  - Ethyl methacrylate
  - Ethyl-tert-butyl ether
  - Hexachloro-1,3-butadiene
  - Iodomethane
  - Isopropylbenzene (Cumene)
  - Isobutanol
  - Methyl acetate
  - Methylene Chloride
  - Methyl methacrylate
  - Methylcyclohexane
  - Methyl-tert-butyl ether
  - Methacrylonitrile
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - Naphthalene
  - n-Butylbenzene
  - n-Hexane
  - n-Propylbenzene
  - o-Xylene
  - p-Isopropyltoluene
  - Propionitrile
  - sec-Butylbenzene
  - Styrene
  - trans-1,2-Dichloroethene

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8260B**
Description: 8260B MSV 5035 Low Level
Client: Sadat Associates
Date: December 13, 2016

Analyte Comments:

QC Batch: 239554

2c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- voc1 (Lab ID: 30200676003)
  - trans-1,3-Dichloropropene
  - trans-1,4-Dichloro-2-butene
  - tert-Amylmethyl ether
  - tert-Butyl Alcohol
  - Tetrachloroethene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
  - Toluene
  - Trichloroethene
  - Trichlorofluoromethane
  - tert-Butylbenzene
  - Vinyl acetate
  - Vinyl chloride
- voc2 (Lab ID: 30200676004)
  - 1,1-Dichloroethane
  - 1,1-Dichloroethene
  - 1,1-Dichloropropene
  - 1,1,1-Trichloroethane
  - 1,1,2-Trichloroethane
  - 1,1,1,2-Tetrachloroethane
  - 1,1,2,2-Tetrachloroethane
  - 1,2,4-Trichlorobenzene
  - 1,2-Dichlorobenzene
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dichloroethane
  - 1,2-Dibromoethane (EDB)
  - 1,2-Dichloropropane
  - 1,2,4-Trimethylbenzene
  - 1,2,3-Trichlorobenzene
  - 1,2,3-Trichloropropane
  - 1,3,5-Trichlorobenzene
  - 1,3-Dichlorobenzene
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 1,4-Dichlorobenzene
  - 1,4-Dioxane (p-Dioxane)
  - 2,2-Dichloropropane
  - 2-Butanone (MEK)
  - 2-Chlorotoluene
  - 2-Chloroethylvinyl ether
  - 2-Hexanone
  - 2-Methylnaphthalene

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8260B**
Description: 8260B MSV 5035 Low Level
Client: Sadat Associates
Date: December 13, 2016

Analyte Comments:

QC Batch: 239554

2c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- voc2 (Lab ID: 30200676004)
  - 2-Nitropropane
  - Allyl chloride
  - 4-Chlorotoluene
  - Carbon disulfide
  - Ethanol
  - Acetone
  - Acrolein
  - Acetonitrile
  - Acrylonitrile
  - Bromochloromethane
  - Benzene
  - Bromobenzene
  - Bromodichloromethane
  - Bromomethane
  - Bromoform
  - cis-1,2-Dichloroethene
  - cis-1,3-Dichloropropene
  - Carbon tetrachloride
  - Cyclohexane
  - Chlorobenzene
  - Chloroprene
  - Chloroethane
  - Chloroform
  - Chloromethane
  - Cyclohexanone
  - Dibromochloromethane
  - Diethyl ether (Ethyl ether)
  - Dichlorodifluoromethane
  - Diisopropyl ether
  - Dibromomethane
  - Ethyl acetate
  - Ethylbenzene
  - Ethyl methacrylate
  - Ethyl-tert-butyl ether
  - Hexachloro-1,3-butadiene
  - Iodomethane
  - Isopropylbenzene (Cumene)
  - Isobutanol
  - Methyl acetate
  - Methylene Chloride
  - Methyl methacrylate
  - Methylcyclohexane

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 8260B**
Description: 8260B MSV 5035 Low Level
Client: Sadat Associates
Date: December 13, 2016

Analyte Comments:

QC Batch: 239554

2c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- voc2 (Lab ID: 30200676004)
  - Methyl-tert-butyl ether
  - Methacrylonitrile
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - Naphthalene
  - n-Butylbenzene
  - n-Hexane
  - n-Propylbenzene
  - o-Xylene
  - p-Isopropyltoluene
  - Propionitrile
  - sec-Butylbenzene
  - Styrene
  - trans-1,2-Dichloroethene
  - trans-1,3-Dichloropropene
  - trans-1,4-Dichloro-2-butene
  - tert-Amylmethyl ether
  - tert-Butyl Alcohol
  - Tetrachloroethene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
  - Toluene
  - Trichloroethene
  - Trichlorofluoromethane
  - tert-Butylbenzene
  - Vinyl acetate
  - Vinyl chloride

N2: The lab does not hold NELAC/TNI accreditation for this parameter.

- BLANK (Lab ID: 1177185)
  - 2-Methylnaphthalene
- LCS (Lab ID: 1177186)
  - 2-Methylnaphthalene
- voc1 (Lab ID: 30200676003)
  - 2-Methylnaphthalene
- voc2 (Lab ID: 30200676004)
  - 2-Methylnaphthalene

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 7196A**
Description: 7196 Chromium, Hexavalent
Client: Sadat Associates
Date: December 13, 2016

General Information:
2 samples were analyzed for EPA 7196A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7196A with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 239005

B: Analyte was detected in the associated method blank.
- BLANK for HBN 239005 [WET/3577 (Lab ID: 1174567)
  - Chromium, Hexavalent

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 239005

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30200782016

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 1174572)
  - Chromium, Hexavalent
- MSD (Lab ID: 1174573)
  - Chromium, Hexavalent

Additional Comments:

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PROJECT NARRATIVE

Project: Prologis RCA
Pace Project No.: 30200676

Method: **EPA 9045C**
Description: 9045 pH Soil
Client: Sadat Associates
Date: December 13, 2016

General Information:
2 samples were analyzed for EPA 9045C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: comp 1 **Lab ID: 30200676001** Collected: 10/25/16 08:53 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides	Analytical Method: EPA 8081A Preparation Method: EPA 3546								
Aldrin	**20.4 U**	ug/kg	20.4	2.8	10	11/08/16 16:51	11/08/16 23:48	309-00-2	M6
alpha-BHC	**20.4 U**	ug/kg	20.4	2.1	10	11/08/16 16:51	11/08/16 23:48	319-84-6	M6
beta-BHC	**31.0**	ug/kg	20.4	3.1	10	11/08/16 16:51	11/08/16 23:48	319-85-7	
delta-BHC	**20.4 U**	ug/kg	20.4	3.0	10	11/08/16 16:51	11/08/16 23:48	319-86-8	M6
gamma-BHC (Lindane)	**20.4 U**	ug/kg	20.4	2.3	10	11/08/16 16:51	11/08/16 23:48	58-89-9	M6
alpha-Chlordane	**34.3**	ug/kg	20.4	2.2	10	11/08/16 16:51	11/08/16 23:48	5103-71-9	M6
gamma-Chlordane	**285**	ug/kg	20.4	2.3	10	11/08/16 16:51	11/08/16 23:48	5103-74-2	C3,M6
4,4'-DDD	**85.3**	ug/kg	40.8	4.4	10	11/08/16 16:51	11/08/16 23:48	72-54-8	M6
4,4'-DDE	**40.8 U**	ug/kg	40.8	20.5	10	11/08/16 16:51	11/08/16 23:48	72-55-9	4c,M6
4,4'-DDT	**40.8 U**	ug/kg	40.8	5.0	10	11/08/16 16:51	11/08/16 23:48	50-29-3	M6
Dieldrin	**40.8 U**	ug/kg	40.8	4.1	10	11/08/16 16:51	11/08/16 23:48	60-57-1	M6
Endosulfan I	**20.4 U**	ug/kg	20.4	2.0	10	11/08/16 16:51	11/08/16 23:48	959-98-8	
Endosulfan II	**40.8 U**	ug/kg	40.8	3.8	10	11/08/16 16:51	11/08/16 23:48	33213-65-9	
Endosulfan sulfate	**40.8 U**	ug/kg	40.8	4.4	10	11/08/16 16:51	11/08/16 23:48	1031-07-8	CH,M6
Endrin	**40.8 U**	ug/kg	40.8	4.4	10	11/08/16 16:51	11/08/16 23:48	72-20-8	
Endrin aldehyde	**40.8 U**	ug/kg	40.8	5.8	10	11/08/16 16:51	11/08/16 23:48	7421-93-4	
Endrin ketone	**40.8 U**	ug/kg	40.8	4.0	10	11/08/16 16:51	11/08/16 23:48	53494-70-5	
Heptachlor	**20.4 U**	ug/kg	20.4	2.6	10	11/08/16 16:51	11/08/16 23:48	76-44-8	M6
Heptachlor epoxide	**20.4 U**	ug/kg	20.4	2.0	10	11/08/16 16:51	11/08/16 23:48	1024-57-3	M6
Methoxychlor	**456**	ug/kg	204	32.0	10	11/08/16 16:51	11/08/16 23:48	72-43-5	M6
Toxaphene	**204 U**	ug/kg	204	18.7	10	11/08/16 16:51	11/08/16 23:48	8001-35-2	
Surrogates									
Tetrachloro-m-xylene (S)	75	%	37-113		10	11/08/16 16:51	11/08/16 23:48	877-09-8	
Decachlorobiphenyl (S)	89	%	39-122		10	11/08/16 16:51	11/08/16 23:48	2051-24-3	
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546								
PCB-1016 (Aroclor 1016)	**200 U**	ug/kg	200	68.5	10	12/05/16 15:58	12/06/16 21:29	12674-11-2	M6
PCB-1221 (Aroclor 1221)	**200 U**	ug/kg	200	61.4	10	12/05/16 15:58	12/06/16 21:29	11104-28-2	
PCB-1232 (Aroclor 1232)	**200 U**	ug/kg	200	98.5	10	12/05/16 15:58	12/06/16 21:29	11141-16-5	
PCB-1242 (Aroclor 1242)	**200 U**	ug/kg	200	34.9	10	12/05/16 15:58	12/06/16 21:29	53469-21-9	
PCB-1248 (Aroclor 1248)	**855**	ug/kg	200	92.4	10	12/05/16 15:58	12/06/16 21:29	12672-29-6	C3
PCB-1254 (Aroclor 1254)	**200 U**	ug/kg	200	25.8	10	12/05/16 15:58	12/06/16 21:29	11097-69-1	
PCB-1260 (Aroclor 1260)	**558**	ug/kg	200	21.1	10	12/05/16 15:58	12/06/16 21:29	11096-82-5	C2,M6
PCB, Total	**1410**	ug/kg	1400	403	10	12/05/16 15:58	12/06/16 21:29	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	44	%	30-107		10	12/05/16 15:58	12/06/16 21:29	877-09-8	
Decachlorobiphenyl (S)	37	%	10-115		10	12/05/16 15:58	12/06/16 21:29	2051-24-3	CL
8151 Chlorinated Herbicides	Analytical Method: EPA 8151A Preparation Method: EPA 8151A								
2,4,5-T	**4.9 U**	ug/kg	4.9	0.25	1	11/09/16 09:30	11/10/16 22:25	93-76-5	H2
2,4,5-TP (Silvex)	**4.9 U**	ug/kg	4.9	0.26	1	11/09/16 09:30	11/10/16 22:25	93-72-1	H2
2,4-D	**9.8 U**	ug/kg	9.8	0.70	1	11/09/16 09:30	11/10/16 22:25	94-75-7	H2
Surrogates									
2,4-DCAA (S)	77	%.	29-136		1	11/09/16 09:30	11/10/16 22:25	19719-28-9	

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ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: comp 1 **Lab ID: 30200676001** Collected: 10/25/16 08:53 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3050B								
Antimony	**0.58 U**	mg/kg	0.58	0.31	1	11/07/16 10:41	11/08/16 18:17	7440-36-0	
Arsenic	**9.2**	mg/kg	0.48	0.42	1	11/07/16 10:41	11/08/16 18:17	7440-38-2	
Beryllium	**0.47**	mg/kg	0.19	0.035	1	11/07/16 10:41	11/08/16 18:17	7440-41-7	
Cadmium	**0.91**	mg/kg	0.29	0.029	1	11/07/16 10:41	11/08/16 18:17	7440-43-9	
Chromium	**53.4**	mg/kg	0.48	0.070	1	11/07/16 10:41	11/08/16 18:17	7440-47-3	
Copper	**58.0**	mg/kg	0.96	0.33	1	11/07/16 10:41	11/08/16 18:17	7440-50-8	
Lead	**234**	mg/kg	0.48	0.46	1	11/07/16 10:41	11/08/16 18:17	7439-92-1	
Nickel	**19.8**	mg/kg	1.9	0.22	1	11/07/16 10:41	11/08/16 18:17	7440-02-0	
Selenium	**1.3**	mg/kg	0.77	0.44	1	11/07/16 10:41	11/08/16 18:17	7782-49-2	B
Silver	**0.58 U**	mg/kg	0.58	0.14	1	11/07/16 10:41	11/08/16 18:17	7440-22-4	
Thallium	**1.9 U**	mg/kg	1.9	0.83	1	11/07/16 10:41	11/08/16 18:17	7440-28-0	
Zinc	**194**	mg/kg	0.96	0.067	1	11/07/16 10:41	11/08/16 18:17	7440-66-6	
6010 MET ICP, TCLP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Leachate Method/Date: EPA 1311; 11/03/16 16:00 Initial pH: 9.09; Final pH: 6.57								
Arsenic	**0.016J**	mg/L	0.050	0.0040	1	11/07/16 12:14	11/08/16 10:24	7440-38-2	B
Barium	**0.30J**	mg/L	1.0	0.00053	1	11/07/16 12:14	11/08/16 10:24	7440-39-3	B
Cadmium	**0.0018J**	mg/L	0.050	0.00034	1	11/07/16 12:14	11/08/16 10:24	7440-43-9	
Chromium	**0.0058J**	mg/L	0.050	0.00053	1	11/07/16 12:14	11/08/16 10:24	7440-47-3	B
Lead	**0.0079J**	mg/L	0.050	0.0040	1	11/07/16 12:14	11/08/16 10:24	7439-92-1	B
Selenium	**0.0058J**	mg/L	0.10	0.0044	1	11/07/16 12:14	11/08/16 10:24	7782-49-2	B
Silver	**0.050 U**	mg/L	0.050	0.00056	1	11/07/16 12:14	11/08/16 10:24	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Leachate Method/Date: EPA 1311; 11/03/16 16:00 Initial pH: 9.09; Final pH: 6.57								
Mercury	**1.0 U**	ug/L	1.0	0.046	1	11/08/16 08:34	11/08/16 21:48	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471A Preparation Method: EPA 7471A								
Mercury	**0.47**	mg/kg	0.12	0.0020	1	11/08/16 11:27	11/09/16 02:01	7439-97-6	
8270 MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270C Preparation Method: EPA 3546								
Acenaphthene	**192J**	ug/kg	405	14.9	1	11/08/16 17:06	11/21/16 00:14	83-32-9	
Acenaphthylene	**122J**	ug/kg	405	13.1	1	11/08/16 17:06	11/21/16 00:14	208-96-8	
Acetophenone	**405 U**	ug/kg	405	18.9	1	11/08/16 17:06	11/21/16 00:14	98-86-2	
Aniline	**405 U**	ug/kg	405	63.8	1	11/08/16 17:06	11/21/16 00:14	62-53-3	R1
Anthracene	**396J**	ug/kg	405	12.7	1	11/08/16 17:06	11/21/16 00:14	120-12-7	
Atrazine	**405 U**	ug/kg	405	19.2	1	11/08/16 17:06	11/21/16 00:14	1912-24-9	
Azobenzene	**405 U**	ug/kg	405	14.1	1	11/08/16 17:06	11/21/16 00:14	103-33-3	N2,R1
Benzaldehyde	**405 U**	ug/kg	405	37.9	1	11/08/16 17:06	11/21/16 00:14	100-52-7	
Benzidine	**4020 U**	ug/kg	4020	4020	1	11/08/16 17:06	11/21/16 00:14	92-87-5	CH,IS, M1
Benzo(a)anthracene	**2180**	ug/kg	405	13.3	1	11/08/16 17:06	11/21/16 00:14	56-55-3	
Benzo(a)pyrene	**2190**	ug/kg	405	16.8	1	11/08/16 17:06	11/21/16 00:14	50-32-8	IS
Benzo(b)fluoranthene	**3700**	ug/kg	405	60.4	1	11/08/16 17:06	11/21/16 00:14	205-99-2	IS,M6, R1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: comp 1 **Lab ID: 30200676001** Collected: 10/25/16 08:53 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270C Preparation Method: EPA 3546								
Benzo(g,h,i)perylene	**517**	ug/kg	405	58.8	1	11/08/16 17:06	11/21/16 00:14	191-24-2	IS,M1
Benzo(k)fluoranthene	**1250**	ug/kg	405	72.1	1	11/08/16 17:06	11/21/16 00:14	207-08-9	IS,M1
Benzoic acid	**1010 U**	ug/kg	1010	558	1	11/08/16 17:06	11/21/16 00:14	65-85-0	
Benzyl alcohol	**405 U**	ug/kg	405	95.2	1	11/08/16 17:06	11/21/16 00:14	100-51-6	
Biphenyl (Diphenyl)	**42.4J**	ug/kg	405	14.1	1	11/08/16 17:06	11/21/16 00:14	92-52-4	
4-Bromophenylphenyl ether	**405 U**	ug/kg	405	41.4	1	11/08/16 17:06	11/21/16 00:14	101-55-3	
Butylbenzylphthalate	**198J**	ug/kg	405	42.4	1	11/08/16 17:06	11/21/16 00:14	85-68-7	M1
Caprolactam	**1010 U**	ug/kg	1010	51.6	1	11/08/16 17:06	11/21/16 00:14	105-60-2	
Carbazole	**226J**	ug/kg	405	41.8	1	11/08/16 17:06	11/21/16 00:14	86-74-8	
4-Chloro-3-methylphenol	**405 U**	ug/kg	405	33.7	1	11/08/16 17:06	11/21/16 00:14	59-50-7	
4-Chloroaniline	**405 U**	ug/kg	405	64.0	1	11/08/16 17:06	11/21/16 00:14	106-47-8	R1
bis(2-Chloroethoxy)methane	**405 U**	ug/kg	405	18.6	1	11/08/16 17:06	11/21/16 00:14	111-91-1	
bis(2-Chloroethyl) ether	**405 U**	ug/kg	405	41.3	1	11/08/16 17:06	11/21/16 00:14	111-44-4	
bis(2-Chloroisopropyl) ether	**405 U**	ug/kg	405	12.7	1	11/08/16 17:06	11/21/16 00:14	108-60-1	
2-Chloronaphthalene	**405 U**	ug/kg	405	14.9	1	11/08/16 17:06	11/21/16 00:14	91-58-7	
2-Chlorophenol	**405 U**	ug/kg	405	14.4	1	11/08/16 17:06	11/21/16 00:14	95-57-8	
4-Chlorophenylphenyl ether	**405 U**	ug/kg	405	59.7	1	11/08/16 17:06	11/21/16 00:14	7005-72-3	
Chrysene	**2050**	ug/kg	405	109	1	11/08/16 17:06	11/21/16 00:14	218-01-9	R1
Dibenz(a,h)anthracene	**142J**	ug/kg	405	59.7	1	11/08/16 17:06	11/21/16 00:14	53-70-3	IS,M1
Dibenzofuran	**123J**	ug/kg	405	68.9	1	11/08/16 17:06	11/21/16 00:14	132-64-9	
1,2-Dichlorobenzene	**405 U**	ug/kg	405	87.8	1	11/08/16 17:06	11/21/16 00:14	95-50-1	
1,3-Dichlorobenzene	**405 U**	ug/kg	405	58.0	1	11/08/16 17:06	11/21/16 00:14	541-73-1	
1,4-Dichlorobenzene	**40.6J**	ug/kg	405	12.9	1	11/08/16 17:06	11/21/16 00:14	106-46-7	M1
3,3'-Dichlorobenzidine	**405 U**	ug/kg	405	116	1	11/08/16 17:06	11/21/16 00:14	91-94-1	
2,4-Dichlorophenol	**405 U**	ug/kg	405	13.6	1	11/08/16 17:06	11/21/16 00:14	120-83-2	
Diethylphthalate	**405 U**	ug/kg	405	15.3	1	11/08/16 17:06	11/21/16 00:14	84-66-2	
2,4-Dimethylphenol	**405 U**	ug/kg	405	40.9	1	11/08/16 17:06	11/21/16 00:14	105-67-9	
Dimethylphthalate	**405 U**	ug/kg	405	17.0	1	11/08/16 17:06	11/21/16 00:14	131-11-3	
Di-n-butylphthalate	**60.8J**	ug/kg	405	14.9	1	11/08/16 17:06	11/21/16 00:14	84-74-2	
4,6-Dinitro-2-methylphenol	**1010 U**	ug/kg	1010	79.0	1	11/08/16 17:06	11/21/16 00:14	534-52-1	6c,M1
2,4-Dinitrophenol	**1010 U**	ug/kg	1010	387	1	11/08/16 17:06	11/21/16 00:14	51-28-5	6c,M1
2,4-Dinitrotoluene	**405 U**	ug/kg	405	19.6	1	11/08/16 17:06	11/21/16 00:14	121-14-2	
2,6-Dinitrotoluene	**405 U**	ug/kg	405	49.6	1	11/08/16 17:06	11/21/16 00:14	606-20-2	
Di-n-octylphthalate	**82.0J**	ug/kg	405	48.6	1	11/08/16 17:06	11/21/16 00:14	117-84-0	IS
bis(2-Ethylhexyl)phthalate	**17100**	ug/kg	4050	788	10	11/08/16 17:06	11/16/16 00:25	117-81-7	M6,R1
Fluoranthene	**3030**	ug/kg	405	100	1	11/08/16 17:06	11/21/16 00:14	206-44-0	
Fluorene	**176J**	ug/kg	405	18.5	1	11/08/16 17:06	11/21/16 00:14	86-73-7	
Hexachloro-1,3-butadiene	**405 U**	ug/kg	405	39.9	1	11/08/16 17:06	11/21/16 00:14	87-68-3	
Hexachlorobenzene	**405 U**	ug/kg	405	45.1	1	11/08/16 17:06	11/21/16 00:14	118-74-1	
Hexachlorocyclopentadiene	**405 U**	ug/kg	405	200	1	11/08/16 17:06	11/21/16 00:14	77-47-4	M1
Hexachloroethane	**405 U**	ug/kg	405	22.3	1	11/08/16 17:06	11/21/16 00:14	67-72-1	
Indeno(1,2,3-cd)pyrene	**523**	ug/kg	405	63.6	1	11/08/16 17:06	11/21/16 00:14	193-39-5	IS,M1
Isophorone	**405 U**	ug/kg	405	34.2	1	11/08/16 17:06	11/21/16 00:14	78-59-1	
1-Methylnaphthalene	**84.3J**	ug/kg	405	21.7	1	11/08/16 17:06	11/21/16 00:14	90-12-0	
2-Methylnaphthalene	**122J**	ug/kg	405	16.7	1	11/08/16 17:06	11/21/16 00:14	91-57-6	

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ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: comp 1 **Lab ID: 30200676001** Collected: 10/25/16 08:53 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270C Preparation Method: EPA 3546								
2-Methylphenol(o-Cresol)	**405 U**	ug/kg	405	46.0	1	11/08/16 17:06	11/21/16 00:14	95-48-7	
3&4-Methylphenol(m&p Cresol)	**811 U**	ug/kg	811	13.4	1	11/08/16 17:06	11/21/16 00:14		
Naphthalene	**255J**	ug/kg	405	127	1	11/08/16 17:06	11/21/16 00:14	91-20-3	
2-Nitroaniline	**1010 U**	ug/kg	1010	16.2	1	11/08/16 17:06	11/21/16 00:14	88-74-4	
3-Nitroaniline	**1010 U**	ug/kg	1010	102	1	11/08/16 17:06	11/21/16 00:14	99-09-2	R1
4-Nitroaniline	**1010 U**	ug/kg	1010	103	1	11/08/16 17:06	11/21/16 00:14	100-01-6	R1
Nitrobenzene	**405 U**	ug/kg	405	12.5	1	11/08/16 17:06	11/21/16 00:14	98-95-3	
2-Nitrophenol	**405 U**	ug/kg	405	20.7	1	11/08/16 17:06	11/21/16 00:14	88-75-5	
4-Nitrophenol	**405 U**	ug/kg	405	51.1	1	11/08/16 17:06	11/21/16 00:14	100-02-7	M1,R1
N-Nitrosodimethylamine	**405 U**	ug/kg	405	46.5	1	11/08/16 17:06	11/21/16 00:14	62-75-9	
N-Nitroso-di-n-propylamine	**405 U**	ug/kg	405	23.9	1	11/08/16 17:06	11/21/16 00:14	621-64-7	
N-Nitrosodiphenylamine	**60.8J**	ug/kg	405	59.8	1	11/08/16 17:06	11/21/16 00:14	86-30-6	
Pentachlorophenol	**1010 U**	ug/kg	1010	127	1	11/08/16 17:06	11/21/16 00:14	87-86-5	
Phenanthrene	**1440**	ug/kg	405	12.7	1	11/08/16 17:06	11/21/16 00:14	85-01-8	M1,R1
Phenol	**405 U**	ug/kg	405	51.6	1	11/08/16 17:06	11/21/16 00:14	108-95-2	
Pyrene	**3570**	ug/kg	405	49.4	1	11/08/16 17:06	11/21/16 00:14	129-00-0	M6,R1
Pyridine	**1010 U**	ug/kg	1010	59.4	1	11/08/16 17:06	11/21/16 00:14	110-86-1	
1,2,4,5-Tetrachlorobenzene	**405 U**	ug/kg	405	83.0	1	11/08/16 17:06	11/21/16 00:14	95-94-3	
2,3,4,6-Tetrachlorophenol	**405 U**	ug/kg	405	71.0	1	11/08/16 17:06	11/21/16 00:14	58-90-2	
1,2,4-Trichlorobenzene	**405 U**	ug/kg	405	52.7	1	11/08/16 17:06	11/21/16 00:14	120-82-1	
2,4,5-Trichlorophenol	**1010 U**	ug/kg	1010	70.5	1	11/08/16 17:06	11/21/16 00:14	95-95-4	
2,4,6-Trichlorophenol	**405 U**	ug/kg	405	130	1	11/08/16 17:06	11/21/16 00:14	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	83	%	33-104		1	11/08/16 17:06	11/21/16 00:14	4165-60-0	
2-Fluorobiphenyl (S)	80	%	38-105		1	11/08/16 17:06	11/21/16 00:14	321-60-8	
Terphenyl-d14 (S)	94	%	33-149		1	11/08/16 17:06	11/21/16 00:14	1718-51-0	
Phenol-d6 (S)	80	%	32-111		1	11/08/16 17:06	11/21/16 00:14	13127-88-3	
2-Fluorophenol (S)	84	%	10-123		1	11/08/16 17:06	11/21/16 00:14	367-12-4	
2,4,6-Tribromophenol (S)	88	%	10-140		1	11/08/16 17:06	11/21/16 00:14	118-79-6	
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 7196A								
Chromium, Hexavalent	**0.29J**	mg/kg	1.2	0.17	1	11/03/16 11:00	11/04/16 13:00	18540-29-9	B
9045 pH Soil	Analytical Method: EPA 9045C								
pH at 25 Degrees C	**8.6**	Std. Units	2.0	1.0	1		10/27/16 13:49		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: comp 2 **Lab ID: 30200676002** Collected: 10/25/16 08:57 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides	Analytical Method: EPA 8081A Preparation Method: EPA 3546								
Aldrin	**18.5 U**	ug/kg	18.5	2.5	10	11/03/16 15:50	11/09/16 02:33	309-00-2	
alpha-BHC	**18.5 U**	ug/kg	18.5	1.9	10	11/03/16 15:50	11/09/16 02:33	319-84-6	
beta-BHC	**32.7**	ug/kg	18.5	2.8	10	11/03/16 15:50	11/09/16 02:33	319-85-7	
delta-BHC	**18.5 U**	ug/kg	18.5	2.7	10	11/03/16 15:50	11/09/16 02:33	319-86-8	
gamma-BHC (Lindane)	**18.5 U**	ug/kg	18.5	2.1	10	11/03/16 15:50	11/09/16 02:33	58-89-9	
alpha-Chlordane	**34.5**	ug/kg	18.5	2.0	10	11/03/16 15:50	11/09/16 02:33	5103-71-9	
gamma-Chlordane	**38.1**	ug/kg	18.5	2.1	10	11/03/16 15:50	11/09/16 02:33	5103-74-2	3c
4,4'-DDD	**37.0 U**	ug/kg	37.0	4.0	10	11/03/16 15:50	11/09/16 02:33	72-54-8	
4,4'-DDE	**20.1J**	ug/kg	37.0	18.6	10	11/03/16 15:50	11/09/16 02:33	72-55-9	4c
4,4'-DDT	**37.0 U**	ug/kg	37.0	4.6	10	11/03/16 15:50	11/09/16 02:33	50-29-3	
Dieldrin	**37.4**	ug/kg	37.0	3.7	10	11/03/16 15:50	11/09/16 02:33	60-57-1	
Endosulfan I	**18.5 U**	ug/kg	18.5	1.8	10	11/03/16 15:50	11/09/16 02:33	959-98-8	
Endosulfan II	**37.0 U**	ug/kg	37.0	3.5	10	11/03/16 15:50	11/09/16 02:33	33213-65-9	
Endosulfan sulfate	**37.0 U**	ug/kg	37.0	4.0	10	11/03/16 15:50	11/09/16 02:33	1031-07-8	CH
Endrin	**7.2J**	ug/kg	37.0	4.0	10	11/03/16 15:50	11/09/16 02:33	72-20-8	
Endrin aldehyde	**39.4**	ug/kg	37.0	5.2	10	11/03/16 15:50	11/09/16 02:33	7421-93-4	C3
Endrin ketone	**37.0 U**	ug/kg	37.0	3.6	10	11/03/16 15:50	11/09/16 02:33	53494-70-5	
Heptachlor	**18.5 U**	ug/kg	18.5	2.3	10	11/03/16 15:50	11/09/16 02:33	76-44-8	
Heptachlor epoxide	**18.5 U**	ug/kg	18.5	1.8	10	11/03/16 15:50	11/09/16 02:33	1024-57-3	
Methoxychlor	**347**	ug/kg	185	29.0	10	11/03/16 15:50	11/09/16 02:33	72-43-5	C3
Toxaphene	**185 U**	ug/kg	185	16.9	10	11/03/16 15:50	11/09/16 02:33	8001-35-2	
Surrogates									
Tetrachloro-m-xylene (S)	80	%	37-113		10	11/03/16 15:50	11/09/16 02:33	877-09-8	
Decachlorobiphenyl (S)	93	%	39-122		10	11/03/16 15:50	11/09/16 02:33	2051-24-3	
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546								
PCB-1016 (Aroclor 1016)	**184 U**	ug/kg	184	63.1	10	12/05/16 15:58	12/06/16 21:52	12674-11-2	
PCB-1221 (Aroclor 1221)	**184 U**	ug/kg	184	56.6	10	12/05/16 15:58	12/06/16 21:52	11104-28-2	
PCB-1232 (Aroclor 1232)	**184 U**	ug/kg	184	90.7	10	12/05/16 15:58	12/06/16 21:52	11141-16-5	
PCB-1242 (Aroclor 1242)	**184 U**	ug/kg	184	32.1	10	12/05/16 15:58	12/06/16 21:52	53469-21-9	
PCB-1248 (Aroclor 1248)	**532**	ug/kg	184	85.1	10	12/05/16 15:58	12/06/16 21:52	12672-29-6	C3
PCB-1254 (Aroclor 1254)	**184 U**	ug/kg	184	23.7	10	12/05/16 15:58	12/06/16 21:52	11097-69-1	
PCB-1260 (Aroclor 1260)	**412**	ug/kg	184	19.4	10	12/05/16 15:58	12/06/16 21:52	11096-82-5	5c,C2
PCB, Total	**944J**	ug/kg	1290	371	10	12/05/16 15:58	12/06/16 21:52	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	46	%	30-107		10	12/05/16 15:58	12/06/16 21:52	877-09-8	
Decachlorobiphenyl (S)	36	%	10-115		10	12/05/16 15:58	12/06/16 21:52	2051-24-3	CL
8151 Chlorinated Herbicides	Analytical Method: EPA 8151A Preparation Method: EPA 8151A								
2,4,5-T	**4.9 U**	ug/kg	4.9	0.25	1	11/09/16 09:30	11/10/16 22:41	93-76-5	H2
2,4,5-TP (Silvex)	**4.9 U**	ug/kg	4.9	0.26	1	11/09/16 09:30	11/10/16 22:41	93-72-1	H2
2,4-D	**9.8 U**	ug/kg	9.8	0.69	1	11/09/16 09:30	11/10/16 22:41	94-75-7	H2
Surrogates									
2,4-DCAA (S)	74	%.	29-136		1	11/09/16 09:30	11/10/16 22:41	19719-28-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: comp 2 **Lab ID: 30200676002** Collected: 10/25/16 08:57 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010B Preparation Method: EPA 3050B								
Antimony	**0.65**	mg/kg	0.54	0.29	1	11/07/16 10:41	11/08/16 18:20	7440-36-0	B
Arsenic	**4.6**	mg/kg	0.45	0.40	1	11/07/16 10:41	11/08/16 18:20	7440-38-2	
Beryllium	**0.52**	mg/kg	0.18	0.033	1	11/07/16 10:41	11/08/16 18:20	7440-41-7	
Cadmium	**0.71**	mg/kg	0.27	0.027	1	11/07/16 10:41	11/08/16 18:20	7440-43-9	
Chromium	**49.6**	mg/kg	0.45	0.066	1	11/07/16 10:41	11/08/16 18:20	7440-47-3	
Copper	**56.8**	mg/kg	0.90	0.31	1	11/07/16 10:41	11/08/16 18:20	7440-50-8	
Lead	**229**	mg/kg	0.45	0.43	1	11/07/16 10:41	11/08/16 18:20	7439-92-1	
Nickel	**22.0**	mg/kg	1.8	0.21	1	11/07/16 10:41	11/08/16 18:20	7440-02-0	
Selenium	**0.46J**	mg/kg	0.72	0.41	1	11/07/16 10:41	11/08/16 18:20	7782-49-2	B
Silver	**0.23J**	mg/kg	0.54	0.13	1	11/07/16 10:41	11/08/16 18:20	7440-22-4	
Thallium	**1.8 U**	mg/kg	1.8	0.78	1	11/07/16 10:41	11/08/16 18:20	7440-28-0	
Zinc	**432**	mg/kg	0.90	0.063	1	11/07/16 10:41	11/08/16 18:20	7440-66-6	
6010 MET ICP, TCLP	Analytical Method: EPA 6010B Preparation Method: EPA 3005A Leachate Method/Date: EPA 1311; 11/03/16 16:00 Initial pH: 9.01; Final pH: 6.69								
Arsenic	**0.0057J**	mg/L	0.050	0.0040	1	11/07/16 12:14	11/08/16 10:26	7440-38-2	B
Barium	**0.33J**	mg/L	1.0	0.00053	1	11/07/16 12:14	11/08/16 10:26	7440-39-3	B
Cadmium	**0.0018J**	mg/L	0.050	0.00034	1	11/07/16 12:14	11/08/16 10:26	7440-43-9	
Chromium	**0.0079J**	mg/L	0.050	0.00053	1	11/07/16 12:14	11/08/16 10:26	7440-47-3	B
Lead	**0.0068J**	mg/L	0.050	0.0040	1	11/07/16 12:14	11/08/16 10:26	7439-92-1	B
Selenium	**0.016J**	mg/L	0.10	0.0044	1	11/07/16 12:14	11/08/16 10:26	7782-49-2	B
Silver	**0.050 U**	mg/L	0.050	0.00056	1	11/07/16 12:14	11/08/16 10:26	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Leachate Method/Date: EPA 1311; 11/03/16 16:00 Initial pH: 9.01; Final pH: 6.69								
Mercury	**1.0 U**	ug/L	1.0	0.046	1	11/08/16 08:34	11/08/16 21:50	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471A Preparation Method: EPA 7471A								
Mercury	**0.38**	mg/kg	0.11	0.0018	1	11/08/16 11:27	11/09/16 02:03	7439-97-6	
	Analytical Method: EPA 7471B								
Mercury	**0.52**	mg/kg	0.22	0.0023	2		11/02/16 23:20	7439-97-6	
8270 MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270C Preparation Method: EPA 3546								
Acenaphthene	**259J**	ug/kg	367	13.4	1	11/03/16 15:34	11/21/16 00:35	83-32-9	1c
Acenaphthylene	**80.2J**	ug/kg	367	11.9	1	11/03/16 15:34	11/21/16 00:35	208-96-8	1c
Acetophenone	**26.0J**	ug/kg	367	17.1	1	11/03/16 15:34	11/21/16 00:35	98-86-2	1c
Aniline	**367 U**	ug/kg	367	57.8	1	11/03/16 15:34	11/21/16 00:35	62-53-3	1c
Anthracene	**706**	ug/kg	367	11.5	1	11/03/16 15:34	11/21/16 00:35	120-12-7	1c
Atrazine	**367 U**	ug/kg	367	17.4	1	11/03/16 15:34	11/21/16 00:35	1912-24-9	1c
Azobenzene	**367 U**	ug/kg	367	12.8	1	11/03/16 15:34	11/21/16 00:35	103-33-3	1c,N2
Benzaldehyde	**79.7J**	ug/kg	367	34.3	1	11/03/16 15:34	11/21/16 00:35	100-52-7	1c,B
Benzidine	**3640 U**	ug/kg	3640	3640	1	11/03/16 15:34	11/21/16 00:35	92-87-5	1c
Benzo(a)anthracene	**3250**	ug/kg	367	12.0	1	11/03/16 15:34	11/21/16 00:35	56-55-3	1c,IS

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: comp 2 **Lab ID: 30200676002** Collected: 10/25/16 08:57 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270C Preparation Method: EPA 3546								
Benzo(a)pyrene	**2700**	ug/kg	367	15.2	1	11/03/16 15:34	11/21/16 00:35	50-32-8	1c,IS
Benzo(b)fluoranthene	**4130**	ug/kg	367	54.7	1	11/03/16 15:34	11/21/16 00:35	205-99-2	1c,IS
Benzo(g,h,i)perylene	**669**	ug/kg	367	53.2	1	11/03/16 15:34	11/21/16 00:35	191-24-2	1c,IS
Benzo(k)fluoranthene	**2150**	ug/kg	367	65.3	1	11/03/16 15:34	11/21/16 00:35	207-08-9	1c,IS
Benzoic acid	**918 U**	ug/kg	918	505	1	11/03/16 15:34	11/21/16 00:35	65-85-0	1c
Benzyl alcohol	**367 U**	ug/kg	367	86.2	1	11/03/16 15:34	11/21/16 00:35	100-51-6	1c
Biphenyl (Diphenyl)	**40.4J**	ug/kg	367	12.8	1	11/03/16 15:34	11/21/16 00:35	92-52-4	1c
4-Bromophenylphenyl ether	**367 U**	ug/kg	367	37.5	1	11/03/16 15:34	11/21/16 00:35	101-55-3	1c
Butylbenzylphthalate	**145J**	ug/kg	367	38.4	1	11/03/16 15:34	11/21/16 00:35	85-68-7	1c,B,IS
Caprolactam	**918 U**	ug/kg	918	46.7	1	11/03/16 15:34	11/21/16 00:35	105-60-2	1c
Carbazole	**357J**	ug/kg	367	37.8	1	11/03/16 15:34	11/21/16 00:35	86-74-8	1c
4-Chloro-3-methylphenol	**367 U**	ug/kg	367	30.5	1	11/03/16 15:34	11/21/16 00:35	59-50-7	1c
4-Chloroaniline	**367 U**	ug/kg	367	58.0	1	11/03/16 15:34	11/21/16 00:35	106-47-8	1c
bis(2-Chloroethoxy)methane	**367 U**	ug/kg	367	16.9	1	11/03/16 15:34	11/21/16 00:35	111-91-1	1c
bis(2-Chloroethyl) ether	**367 U**	ug/kg	367	37.4	1	11/03/16 15:34	11/21/16 00:35	111-44-4	1c
bis(2-Chloroisopropyl) ether	**367 U**	ug/kg	367	11.5	1	11/03/16 15:34	11/21/16 00:35	108-60-1	1c
2-Chloronaphthalene	**367 U**	ug/kg	367	13.4	1	11/03/16 15:34	11/21/16 00:35	91-58-7	1c
2-Chlorophenol	**367 U**	ug/kg	367	13.0	1	11/03/16 15:34	11/21/16 00:35	95-57-8	1c
4-Chlorophenylphenyl ether	**367 U**	ug/kg	367	54.0	1	11/03/16 15:34	11/21/16 00:35	7005-72-3	1c
Chrysene	**2970**	ug/kg	367	99.1	1	11/03/16 15:34	11/21/16 00:35	218-01-9	1c,IS
Dibenz(a,h)anthracene	**231J**	ug/kg	367	54.0	1	11/03/16 15:34	11/21/16 00:35	53-70-3	1c,IS
Dibenzofuran	**148J**	ug/kg	367	62.4	1	11/03/16 15:34	11/21/16 00:35	132-64-9	1c
1,2-Dichlorobenzene	**367 U**	ug/kg	367	79.5	1	11/03/16 15:34	11/21/16 00:35	95-50-1	1c
1,3-Dichlorobenzene	**367 U**	ug/kg	367	52.5	1	11/03/16 15:34	11/21/16 00:35	541-73-1	1c
1,4-Dichlorobenzene	**31.8J**	ug/kg	367	11.7	1	11/03/16 15:34	11/21/16 00:35	106-46-7	1c
3,3'-Dichlorobenzidine	**367 U**	ug/kg	367	105	1	11/03/16 15:34	11/21/16 00:35	91-94-1	1c,IS
2,4-Dichlorophenol	**367 U**	ug/kg	367	12.3	1	11/03/16 15:34	11/21/16 00:35	120-83-2	1c
Diethylphthalate	**367 U**	ug/kg	367	13.9	1	11/03/16 15:34	11/21/16 00:35	84-66-2	1c
2,4-Dimethylphenol	**367 U**	ug/kg	367	37.0	1	11/03/16 15:34	11/21/16 00:35	105-67-9	1c
Dimethylphthalate	**367 U**	ug/kg	367	15.4	1	11/03/16 15:34	11/21/16 00:35	131-11-3	1c
Di-n-butylphthalate	**70.1J**	ug/kg	367	13.4	1	11/03/16 15:34	11/21/16 00:35	84-74-2	1c,B
4,6-Dinitro-2-methylphenol	**918 U**	ug/kg	918	71.5	1	11/03/16 15:34	11/21/16 00:35	534-52-1	1c,6c
2,4-Dinitrophenol	**918 U**	ug/kg	918	351	1	11/03/16 15:34	11/21/16 00:35	51-28-5	1c,6c
2,4-Dinitrotoluene	**367 U**	ug/kg	367	17.7	1	11/03/16 15:34	11/21/16 00:35	121-14-2	1c
2,6-Dinitrotoluene	**367 U**	ug/kg	367	44.9	1	11/03/16 15:34	11/21/16 00:35	606-20-2	1c
Di-n-octylphthalate	**367 U**	ug/kg	367	44.0	1	11/03/16 15:34	11/21/16 00:35	117-84-0	1c,IS
bis(2-Ethylhexyl)phthalate	**7340**	ug/kg	367	71.3	1	11/03/16 15:34	11/14/16 18:25	117-81-7	1c
Fluoranthene	**4760**	ug/kg	367	90.7	1	11/03/16 15:34	11/21/16 00:35	206-44-0	1c
Fluorene	**246J**	ug/kg	367	16.8	1	11/03/16 15:34	11/21/16 00:35	86-73-7	1c
Hexachloro-1,3-butadiene	**367 U**	ug/kg	367	36.2	1	11/03/16 15:34	11/21/16 00:35	87-68-3	1c
Hexachlorobenzene	**367 U**	ug/kg	367	40.8	1	11/03/16 15:34	11/21/16 00:35	118-74-1	1c
Hexachlorocyclopentadiene	**367 U**	ug/kg	367	181	1	11/03/16 15:34	11/21/16 00:35	77-47-4	1c
Hexachloroethane	**367 U**	ug/kg	367	20.2	1	11/03/16 15:34	11/21/16 00:35	67-72-1	1c
Indeno(1,2,3-cd)pyrene	**676**	ug/kg	367	57.5	1	11/03/16 15:34	11/21/16 00:35	193-39-5	1c,IS
Isophorone	**367 U**	ug/kg	367	31.0	1	11/03/16 15:34	11/21/16 00:35	78-59-1	1c

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ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: comp 2 **Lab ID: 30200676002** Collected: 10/25/16 08:57 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV FULL LIST MICROWAVE	Analytical Method: EPA 8270C Preparation Method: EPA 3546								
1-Methylnaphthalene	**56.4J**	ug/kg	367	19.6	1	11/03/16 15:34	11/21/16 00:35	90-12-0	1c
2-Methylnaphthalene	**92.2J**	ug/kg	367	15.1	1	11/03/16 15:34	11/21/16 00:35	91-57-6	1c
2-Methylphenol(o-Cresol)	**367 U**	ug/kg	367	41.7	1	11/03/16 15:34	11/21/16 00:35	95-48-7	1c
3&4-Methylphenol(m&p Cresol)	**14.6J**	ug/kg	734	12.1	1	11/03/16 15:34	11/21/16 00:35		1c,B
Naphthalene	**177J**	ug/kg	367	115	1	11/03/16 15:34	11/21/16 00:35	91-20-3	1c
2-Nitroaniline	**918 U**	ug/kg	918	14.7	1	11/03/16 15:34	11/21/16 00:35	88-74-4	1c
3-Nitroaniline	**918 U**	ug/kg	918	91.9	1	11/03/16 15:34	11/21/16 00:35	99-09-2	1c
4-Nitroaniline	**918 U**	ug/kg	918	93.6	1	11/03/16 15:34	11/21/16 00:35	100-01-6	1c
Nitrobenzene	**367 U**	ug/kg	367	11.4	1	11/03/16 15:34	11/21/16 00:35	98-95-3	1c
2-Nitrophenol	**367 U**	ug/kg	367	18.7	1	11/03/16 15:34	11/21/16 00:35	88-75-5	1c
4-Nitrophenol	**367 U**	ug/kg	367	46.3	1	11/03/16 15:34	11/21/16 00:35	100-02-7	1c
N-Nitrosodimethylamine	**367 U**	ug/kg	367	42.1	1	11/03/16 15:34	11/21/16 00:35	62-75-9	1c
N-Nitroso-di-n-propylamine	**367 U**	ug/kg	367	21.6	1	11/03/16 15:34	11/21/16 00:35	621-64-7	1c
N-Nitrosodiphenylamine	**367 U**	ug/kg	367	54.1	1	11/03/16 15:34	11/21/16 00:35	86-30-6	1c
Pentachlorophenol	**918 U**	ug/kg	918	115	1	11/03/16 15:34	11/21/16 00:35	87-86-5	1c
Phenanthrene	**2780**	ug/kg	367	11.5	1	11/03/16 15:34	11/21/16 00:35	85-01-8	1c
Phenol	**367 U**	ug/kg	367	46.7	1	11/03/16 15:34	11/21/16 00:35	108-95-2	1c
Pyrene	**5130**	ug/kg	367	44.8	1	11/03/16 15:34	11/14/16 18:25	129-00-0	1c
Pyridine	**918 U**	ug/kg	918	53.8	1	11/03/16 15:34	11/21/16 00:35	110-86-1	1c
1,2,4,5-Tetrachlorobenzene	**367 U**	ug/kg	367	75.2	1	11/03/16 15:34	11/21/16 00:35	95-94-3	1c
2,3,4,6-Tetrachlorophenol	**367 U**	ug/kg	367	64.3	1	11/03/16 15:34	11/21/16 00:35	58-90-2	1c
1,2,4-Trichlorobenzene	**367 U**	ug/kg	367	47.7	1	11/03/16 15:34	11/21/16 00:35	120-82-1	1c
2,4,5-Trichlorophenol	**918 U**	ug/kg	918	63.8	1	11/03/16 15:34	11/21/16 00:35	95-95-4	1c
2,4,6-Trichlorophenol	**367 U**	ug/kg	367	118	1	11/03/16 15:34	11/21/16 00:35	88-06-2	1c
Surrogates									
Nitrobenzene-d5 (S)	85	%	33-104		1	11/03/16 15:34	11/21/16 00:35	4165-60-0	
2-Fluorobiphenyl (S)	89	%	38-105		1	11/03/16 15:34	11/21/16 00:35	321-60-8	
Terphenyl-d14 (S)	141	%	33-149		1	11/03/16 15:34	11/21/16 00:35	1718-51-0	IS
Phenol-d6 (S)	88	%	32-111		1	11/03/16 15:34	11/21/16 00:35	13127-88-3	
2-Fluorophenol (S)	90	%	10-123		1	11/03/16 15:34	11/21/16 00:35	367-12-4	
2,4,6-Tribromophenol (S)	101	%	10-140		1	11/03/16 15:34	11/21/16 00:35	118-79-6	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**10.8**	%	0.10	0.10	1		11/08/16 17:57		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 7196A								
Chromium, Hexavalent	**0.22J**	mg/kg	1.1	0.15	1	11/03/16 11:00	11/04/16 13:00	18540-29-9	B
9045 pH Soil	Analytical Method: EPA 9045C								
pH at 25 Degrees C	**8.5**	Std. Units	2.0	1.0	1		10/27/16 13:49		

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ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: voc1 **Lab ID: 30200676003** Collected: 10/25/16 09:20 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV 5035 Low Level	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Acetone	**73.5**	ug/kg	11.9	5.8	1	11/08/16 13:41	11/08/16 16:41	67-64-1	2c
Acetonitrile	**59.5 U**	ug/kg	59.5	27.0	1	11/08/16 13:41	11/08/16 16:41	75-05-8	2c
Acrolein	**59.5 U**	ug/kg	59.5	8.3	1	11/08/16 13:41	11/08/16 16:41	107-02-8	2c
Acrylonitrile	**6.0 U**	ug/kg	6.0	3.5	1	11/08/16 13:41	11/08/16 16:41	107-13-1	2c
Allyl chloride	**59.5 U**	ug/kg	59.5	16.9	1	11/08/16 13:41	11/08/16 16:41	107-05-1	2c
tert-Amylmethyl ether	**6.0 U**	ug/kg	6.0	1.1	1	11/08/16 13:41	11/08/16 16:41	994-05-8	2c
Benzene	**2.1J**	ug/kg	6.0	1.6	1	11/08/16 13:41	11/08/16 16:41	71-43-2	2c
Bromobenzene	**6.0 U**	ug/kg	6.0	1.9	1	11/08/16 13:41	11/08/16 16:41	108-86-1	2c
Bromochloromethane	**6.0 U**	ug/kg	6.0	2.1	1	11/08/16 13:41	11/08/16 16:41	74-97-5	2c
Bromodichloromethane	**6.0 U**	ug/kg	6.0	1.5	1	11/08/16 13:41	11/08/16 16:41	75-27-4	2c
Bromoform	**6.0 U**	ug/kg	6.0	4.9	1	11/08/16 13:41	11/08/16 16:41	75-25-2	2c
Bromomethane	**6.0 U**	ug/kg	6.0	5.2	1	11/08/16 13:41	11/08/16 16:41	74-83-9	2c
TOTAL BTEX	**35.7 U**	ug/kg	35.7	8.1	1	11/08/16 13:41	11/08/16 16:41		
2-Butanone (MEK)	**8.8J**	ug/kg	11.9	2.5	1	11/08/16 13:41	11/08/16 16:41	78-93-3	2c
tert-Butyl Alcohol	**59.5 U**	ug/kg	59.5	16.5	1	11/08/16 13:41	11/08/16 16:41	75-65-0	2c
n-Butylbenzene	**6.0 U**	ug/kg	6.0	2.9	1	11/08/16 13:41	11/08/16 16:41	104-51-8	2c
sec-Butylbenzene	**6.0 U**	ug/kg	6.0	3.0	1	11/08/16 13:41	11/08/16 16:41	135-98-8	2c
tert-Butylbenzene	**6.0 U**	ug/kg	6.0	2.9	1	11/08/16 13:41	11/08/16 16:41	98-06-6	2c
Carbon disulfide	**6.0 U**	ug/kg	6.0	3.4	1	11/08/16 13:41	11/08/16 16:41	75-15-0	2c
Carbon tetrachloride	**6.0 U**	ug/kg	6.0	5.3	1	11/08/16 13:41	11/08/16 16:41	56-23-5	2c
Chlorobenzene	**6.0 U**	ug/kg	6.0	0.81	1	11/08/16 13:41	11/08/16 16:41	108-90-7	2c
Chloroethane	**6.0 U**	ug/kg	6.0	2.2	1	11/08/16 13:41	11/08/16 16:41	75-00-3	2c
2-Chloroethylvinyl ether	**11.9 U**	ug/kg	11.9	5.0	1	11/08/16 13:41	11/08/16 16:41	110-75-8	2c
Chloroform	**6.0 U**	ug/kg	6.0	3.2	1	11/08/16 13:41	11/08/16 16:41	67-66-3	2c
Chloromethane	**6.0 U**	ug/kg	6.0	3.0	1	11/08/16 13:41	11/08/16 16:41	74-87-3	2c
Chloroprene	**6.0 U**	ug/kg	6.0	3.3	1	11/08/16 13:41	11/08/16 16:41	126-99-8	2c
2-Chlorotoluene	**6.0 U**	ug/kg	6.0	1.6	1	11/08/16 13:41	11/08/16 16:41	95-49-8	2c
4-Chlorotoluene	**6.0 U**	ug/kg	6.0	1.6	1	11/08/16 13:41	11/08/16 16:41	106-43-4	2c
Cyclohexane	**11.9 U**	ug/kg	11.9	4.1	1	11/08/16 13:41	11/08/16 16:41	110-82-7	2c
Cyclohexanone	**59.5 U**	ug/kg	59.5	8.0	1	11/08/16 13:41	11/08/16 16:41	108-94-1	2c
1,2-Dibromo-3-chloropropane	**6.0 U**	ug/kg	6.0	2.3	1	11/08/16 13:41	11/08/16 16:41	96-12-8	2c
Dibromochloromethane	**6.0 U**	ug/kg	6.0	1.8	1	11/08/16 13:41	11/08/16 16:41	124-48-1	2c
1,2-Dibromoethane (EDB)	**6.0 U**	ug/kg	6.0	1.5	1	11/08/16 13:41	11/08/16 16:41	106-93-4	2c
Dibromomethane	**6.0 U**	ug/kg	6.0	1.2	1	11/08/16 13:41	11/08/16 16:41	74-95-3	2c
1,2-Dichlorobenzene	**6.0 U**	ug/kg	6.0	0.73	1	11/08/16 13:41	11/08/16 16:41	95-50-1	2c
1,3-Dichlorobenzene	**6.0 U**	ug/kg	6.0	0.93	1	11/08/16 13:41	11/08/16 16:41	541-73-1	2c
1,4-Dichlorobenzene	**6.0 U**	ug/kg	6.0	1.0	1	11/08/16 13:41	11/08/16 16:41	106-46-7	2c
trans-1,4-Dichloro-2-butene	**6.0 U**	ug/kg	6.0	1.2	1	11/08/16 13:41	11/08/16 16:41	110-57-6	2c
Dichlorodifluoromethane	**6.0 U**	ug/kg	6.0	4.3	1	11/08/16 13:41	11/08/16 16:41	75-71-8	2c
1,1-Dichloroethane	**6.0 U**	ug/kg	6.0	3.1	1	11/08/16 13:41	11/08/16 16:41	75-34-3	2c
1,2-Dichloroethane	**6.0 U**	ug/kg	6.0	1.3	1	11/08/16 13:41	11/08/16 16:41	107-06-2	2c
1,2-Dichloroethene (Total)	**11.9 U**	ug/kg	11.9	5.7	1	11/08/16 13:41	11/08/16 16:41	540-59-0	
1,1-Dichloroethene	**6.0 U**	ug/kg	6.0	3.4	1	11/08/16 13:41	11/08/16 16:41	75-35-4	2c
cis-1,2-Dichloroethene	**6.0 U**	ug/kg	6.0	2.2	1	11/08/16 13:41	11/08/16 16:41	156-59-2	2c
trans-1,2-Dichloroethene	**6.0 U**	ug/kg	6.0	3.5	1	11/08/16 13:41	11/08/16 16:41	156-60-5	2c

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: voc1 **Lab ID: 30200676003** Collected: 10/25/16 09:20 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV 5035 Low Level	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
1,2-Dichloropropane	**6.0 U**	ug/kg	6.0	1.4	1	11/08/16 13:41	11/08/16 16:41	78-87-5	2c
1,3-Dichloropropane	**6.0 U**	ug/kg	6.0	1.2	1	11/08/16 13:41	11/08/16 16:41	142-28-9	2c
2,2-Dichloropropane	**6.0 U**	ug/kg	6.0	2.3	1	11/08/16 13:41	11/08/16 16:41	594-20-7	2c
1,1-Dichloropropene	**6.0 U**	ug/kg	6.0	3.5	1	11/08/16 13:41	11/08/16 16:41	563-58-6	2c
cis-1,3-Dichloropropene	**6.0 U**	ug/kg	6.0	1.6	1	11/08/16 13:41	11/08/16 16:41	10061-01-5	2c
trans-1,3-Dichloropropene	**6.0 U**	ug/kg	6.0	1.2	1	11/08/16 13:41	11/08/16 16:41	10061-02-6	2c
Diethyl ether (Ethyl ether)	**6.0 U**	ug/kg	6.0	2.5	1	11/08/16 13:41	11/08/16 16:41	60-29-7	2c
Diisopropyl ether	**6.0 U**	ug/kg	6.0	3.7	1	11/08/16 13:41	11/08/16 16:41	108-20-3	2c
1,4-Dioxane (p-Dioxane)	**119 U**	ug/kg	119	61.0	1	11/08/16 13:41	11/08/16 16:41	123-91-1	2c
Ethanol	**238 U**	ug/kg	238	67.5	1	11/08/16 13:41	11/08/16 16:41	64-17-5	2c
Ethyl acetate	**6.0 U**	ug/kg	6.0	2.4	1	11/08/16 13:41	11/08/16 16:41	141-78-6	2c
Ethylbenzene	**6.0 U**	ug/kg	6.0	1.2	1	11/08/16 13:41	11/08/16 16:41	100-41-4	2c
Ethyl methacrylate	**6.0 U**	ug/kg	6.0	1.2	1	11/08/16 13:41	11/08/16 16:41	97-63-2	2c
Ethyl-tert-butyl ether	**6.0 U**	ug/kg	6.0	3.0	1	11/08/16 13:41	11/08/16 16:41	637-92-3	2c
Hexachloro-1,3-butadiene	**6.0 U**	ug/kg	6.0	2.9	1	11/08/16 13:41	11/08/16 16:41	87-68-3	2c
n-Hexane	**11.9 U**	ug/kg	11.9	10.6	1	11/08/16 13:41	11/08/16 16:41	110-54-3	2c
2-Hexanone	**11.9 U**	ug/kg	11.9	1.7	1	11/08/16 13:41	11/08/16 16:41	591-78-6	2c
Iodomethane	**59.5 U**	ug/kg	59.5	10.9	1	11/08/16 13:41	11/08/16 16:41	74-88-4	2c
Isobutanol	**59.5 U**	ug/kg	59.5	55.3	1	11/08/16 13:41	11/08/16 16:41	78-83-1	2c
Isopropylbenzene (Cumene)	**6.0 U**	ug/kg	6.0	2.1	1	11/08/16 13:41	11/08/16 16:41	98-82-8	2c
p-Isopropyltoluene	**6.0 U**	ug/kg	6.0	2.5	1	11/08/16 13:41	11/08/16 16:41	99-87-6	2c
Methacrylonitrile	**6.0 U**	ug/kg	6.0	1.6	1	11/08/16 13:41	11/08/16 16:41	126-98-7	2c
Methyl acetate	**59.5 U**	ug/kg	59.5	2.5	1	11/08/16 13:41	11/08/16 16:41	79-20-9	2c
Methylcyclohexane	**11.9 U**	ug/kg	11.9	3.8	1	11/08/16 13:41	11/08/16 16:41	108-87-2	2c
Methylene Chloride	**6.0 U**	ug/kg	6.0	4.3	1	11/08/16 13:41	11/08/16 16:41	75-09-2	2c
Methyl methacrylate	**6.0 U**	ug/kg	6.0	1.3	1	11/08/16 13:41	11/08/16 16:41	80-62-6	2c
2-Methylnaphthalene	**6.0 U**	ug/kg	6.0	2.2	1	11/08/16 13:41	11/08/16 16:41	91-57-6	2c,N2
4-Methyl-2-pentanone (MIBK)	**11.9 U**	ug/kg	11.9	2.0	1	11/08/16 13:41	11/08/16 16:41	108-10-1	2c
Methyl-tert-butyl ether	**6.0 U**	ug/kg	6.0	2.9	1	11/08/16 13:41	11/08/16 16:41	1634-04-4	2c
Naphthalene	**3.3J**	ug/kg	6.0	1.2	1	11/08/16 13:41	11/08/16 16:41	91-20-3	2c
2-Nitropropane	**59.5 U**	ug/kg	59.5	23.1	1	11/08/16 13:41	11/08/16 16:41	79-46-9	2c
Propionitrile	**6.0 U**	ug/kg	6.0	4.9	1	11/08/16 13:41	11/08/16 16:41	107-12-0	2c
n-Propylbenzene	**6.0 U**	ug/kg	6.0	2.1	1	11/08/16 13:41	11/08/16 16:41	103-65-1	2c
Styrene	**6.0 U**	ug/kg	6.0	1.3	1	11/08/16 13:41	11/08/16 16:41	100-42-5	2c
1,1,1,2-Tetrachloroethane	**6.0 U**	ug/kg	6.0	1.4	1	11/08/16 13:41	11/08/16 16:41	630-20-6	2c
1,1,2,2-Tetrachloroethane	**6.0 U**	ug/kg	6.0	1.7	1	11/08/16 13:41	11/08/16 16:41	79-34-5	2c
Tetrachloroethene	**6.0 U**	ug/kg	6.0	3.5	1	11/08/16 13:41	11/08/16 16:41	127-18-4	2c
Tetrahydrofuran	**6.0 U**	ug/kg	6.0	5.2	1	11/08/16 13:41	11/08/16 16:41	109-99-9	2c
Toluene	**2.1J**	ug/kg	6.0	1.9	1	11/08/16 13:41	11/08/16 16:41	108-88-3	2c
1,2,3-Trichlorobenzene	**6.0 U**	ug/kg	6.0	1.3	1	11/08/16 13:41	11/08/16 16:41	87-61-6	2c
1,2,4-Trichlorobenzene	**6.0 U**	ug/kg	6.0	1.9	1	11/08/16 13:41	11/08/16 16:41	120-82-1	2c
1,3,5-Trichlorobenzene	**6.0 U**	ug/kg	6.0	6.0	1	11/08/16 13:41	11/08/16 16:41	108-70-3	2c,L3
1,1,1-Trichloroethane	**6.0 U**	ug/kg	6.0	2.5	1	11/08/16 13:41	11/08/16 16:41	71-55-6	2c
1,1,2-Trichloroethane	**6.0 U**	ug/kg	6.0	1.3	1	11/08/16 13:41	11/08/16 16:41	79-00-5	2c
Trichloroethene	**6.0 U**	ug/kg	6.0	2.6	1	11/08/16 13:41	11/08/16 16:41	79-01-6	2c

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: voc1 **Lab ID: 30200676003** Collected: 10/25/16 09:20 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV 5035 Low Level	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Trichlorofluoromethane	**6.0 U**	ug/kg	6.0	3.6	1	11/08/16 13:41	11/08/16 16:41	75-69-4	2c
1,2,3-Trichloropropane	**6.0 U**	ug/kg	6.0	1.8	1	11/08/16 13:41	11/08/16 16:41	96-18-4	2c
1,1,2-Trichlorotrifluoroethane	**59.5 U**	ug/kg	59.5	4.3	1	11/08/16 13:41	11/08/16 16:41	76-13-1	2c
1,2,4-Trimethylbenzene	**6.0 U**	ug/kg	6.0	1.7	1	11/08/16 13:41	11/08/16 16:41	95-63-6	2c
1,3,5-Trimethylbenzene	**6.0 U**	ug/kg	6.0	2.0	1	11/08/16 13:41	11/08/16 16:41	108-67-8	2c
Vinyl acetate	**59.5 U**	ug/kg	59.5	3.4	1	11/08/16 13:41	11/08/16 16:41	108-05-4	2c
Vinyl chloride	**6.0 U**	ug/kg	6.0	3.4	1	11/08/16 13:41	11/08/16 16:41	75-01-4	2c
Xylene (Total)	**3.9J**	ug/kg	17.9	3.4	1	11/08/16 13:41	11/08/16 16:41	1330-20-7	
m&p-Xylene	**3.9J**	ug/kg	11.9	2.2	1	11/08/16 13:41	11/08/16 16:41	179601-23-1	2c
o-Xylene	**6.0 U**	ug/kg	6.0	1.2	1	11/08/16 13:41	11/08/16 16:41	95-47-6	2c
Surrogates									
Toluene-d8 (S)	103	%	68-135		1	11/08/16 13:41	11/08/16 16:41	2037-26-5	
4-Bromofluorobenzene (S)	113	%	65-146		1	11/08/16 13:41	11/08/16 16:41	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	69-137		1	11/08/16 13:41	11/08/16 16:41	17060-07-0	
Dibromofluoromethane (S)	104	%	70-130		1	11/08/16 13:41	11/08/16 16:41	1868-53-7	
Tentatively Identified Compounds									
Propene	**4.6**	ug/kg			1	11/08/16 13:41	11/08/16 16:41	115-07-1	N
Unknown aldehyde	**7.1**	ug/kg			1	11/08/16 13:41	11/08/16 16:41		N
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**8.5**	%	0.10	0.10	1		11/08/16 17:57		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: voc2 **Lab ID: 30200676004** Collected: 10/25/16 09:12 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV 5035 Low Level	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Acetone	**10.5 U**	ug/kg	10.5	5.2	1	11/08/16 13:41	11/08/16 17:07	67-64-1	2c
Acetonitrile	**52.7 U**	ug/kg	52.7	23.9	1	11/08/16 13:41	11/08/16 17:07	75-05-8	2c
Acrolein	**52.7 U**	ug/kg	52.7	7.4	1	11/08/16 13:41	11/08/16 17:07	107-02-8	2c
Acrylonitrile	**5.3 U**	ug/kg	5.3	3.1	1	11/08/16 13:41	11/08/16 17:07	107-13-1	2c
Allyl chloride	**52.7 U**	ug/kg	52.7	15.0	1	11/08/16 13:41	11/08/16 17:07	107-05-1	2c
tert-Amylmethyl ether	**5.3 U**	ug/kg	5.3	0.97	1	11/08/16 13:41	11/08/16 17:07	994-05-8	2c
Benzene	**5.3 U**	ug/kg	5.3	1.4	1	11/08/16 13:41	11/08/16 17:07	71-43-2	2c
Bromobenzene	**5.3 U**	ug/kg	5.3	1.7	1	11/08/16 13:41	11/08/16 17:07	108-86-1	2c
Bromochloromethane	**5.3 U**	ug/kg	5.3	1.8	1	11/08/16 13:41	11/08/16 17:07	74-97-5	2c
Bromodichloromethane	**5.3 U**	ug/kg	5.3	1.4	1	11/08/16 13:41	11/08/16 17:07	75-27-4	2c
Bromoform	**5.3 U**	ug/kg	5.3	4.3	1	11/08/16 13:41	11/08/16 17:07	75-25-2	2c
Bromomethane	**5.3 U**	ug/kg	5.3	4.6	1	11/08/16 13:41	11/08/16 17:07	74-83-9	2c
TOTAL BTEX	**31.6 U**	ug/kg	31.6	7.1	1	11/08/16 13:41	11/08/16 17:07		
2-Butanone (MEK)	**10.5 U**	ug/kg	10.5	2.2	1	11/08/16 13:41	11/08/16 17:07	78-93-3	2c
tert-Butyl Alcohol	**52.7 U**	ug/kg	52.7	14.6	1	11/08/16 13:41	11/08/16 17:07	75-65-0	2c
n-Butylbenzene	**5.3 U**	ug/kg	5.3	2.6	1	11/08/16 13:41	11/08/16 17:07	104-51-8	2c
sec-Butylbenzene	**5.3 U**	ug/kg	5.3	2.6	1	11/08/16 13:41	11/08/16 17:07	135-98-8	2c
tert-Butylbenzene	**5.3 U**	ug/kg	5.3	2.5	1	11/08/16 13:41	11/08/16 17:07	98-06-6	2c
Carbon disulfide	**5.3 U**	ug/kg	5.3	3.0	1	11/08/16 13:41	11/08/16 17:07	75-15-0	2c
Carbon tetrachloride	**5.3 U**	ug/kg	5.3	4.7	1	11/08/16 13:41	11/08/16 17:07	56-23-5	2c
Chlorobenzene	**5.3 U**	ug/kg	5.3	0.72	1	11/08/16 13:41	11/08/16 17:07	108-90-7	2c
Chloroethane	**5.3 U**	ug/kg	5.3	2.0	1	11/08/16 13:41	11/08/16 17:07	75-00-3	2c
2-Chloroethylvinyl ether	**10.5 U**	ug/kg	10.5	4.5	1	11/08/16 13:41	11/08/16 17:07	110-75-8	2c
Chloroform	**5.3 U**	ug/kg	5.3	2.9	1	11/08/16 13:41	11/08/16 17:07	67-66-3	2c
Chloromethane	**5.3 U**	ug/kg	5.3	2.6	1	11/08/16 13:41	11/08/16 17:07	74-87-3	2c
Chloroprene	**5.3 U**	ug/kg	5.3	2.9	1	11/08/16 13:41	11/08/16 17:07	126-99-8	2c
2-Chlorotoluene	**5.3 U**	ug/kg	5.3	1.4	1	11/08/16 13:41	11/08/16 17:07	95-49-8	2c
4-Chlorotoluene	**5.3 U**	ug/kg	5.3	1.4	1	11/08/16 13:41	11/08/16 17:07	106-43-4	2c
Cyclohexane	**10.5 U**	ug/kg	10.5	3.6	1	11/08/16 13:41	11/08/16 17:07	110-82-7	2c
Cyclohexanone	**52.7 U**	ug/kg	52.7	7.0	1	11/08/16 13:41	11/08/16 17:07	108-94-1	2c
1,2-Dibromo-3-chloropropane	**5.3 U**	ug/kg	5.3	2.1	1	11/08/16 13:41	11/08/16 17:07	96-12-8	2c
Dibromochloromethane	**5.3 U**	ug/kg	5.3	1.6	1	11/08/16 13:41	11/08/16 17:07	124-48-1	2c
1,2-Dibromoethane (EDB)	**5.3 U**	ug/kg	5.3	1.3	1	11/08/16 13:41	11/08/16 17:07	106-93-4	2c
Dibromomethane	**5.3 U**	ug/kg	5.3	1.1	1	11/08/16 13:41	11/08/16 17:07	74-95-3	2c
1,2-Dichlorobenzene	**5.3 U**	ug/kg	5.3	0.64	1	11/08/16 13:41	11/08/16 17:07	95-50-1	2c
1,3-Dichlorobenzene	**5.3 U**	ug/kg	5.3	0.82	1	11/08/16 13:41	11/08/16 17:07	541-73-1	2c
1,4-Dichlorobenzene	**5.3 U**	ug/kg	5.3	0.90	1	11/08/16 13:41	11/08/16 17:07	106-46-7	2c
trans-1,4-Dichloro-2-butene	**5.3 U**	ug/kg	5.3	1.0	1	11/08/16 13:41	11/08/16 17:07	110-57-6	2c
Dichlorodifluoromethane	**5.3 U**	ug/kg	5.3	3.8	1	11/08/16 13:41	11/08/16 17:07	75-71-8	2c
1,1-Dichloroethane	**5.3 U**	ug/kg	5.3	2.8	1	11/08/16 13:41	11/08/16 17:07	75-34-3	2c
1,2-Dichloroethane	**5.3 U**	ug/kg	5.3	1.1	1	11/08/16 13:41	11/08/16 17:07	107-06-2	2c
1,2-Dichloroethene (Total)	**10.5 U**	ug/kg	10.5	5.0	1	11/08/16 13:41	11/08/16 17:07	540-59-0	
1,1-Dichloroethene	**5.3 U**	ug/kg	5.3	3.0	1	11/08/16 13:41	11/08/16 17:07	75-35-4	2c
cis-1,2-Dichloroethene	**5.3 U**	ug/kg	5.3	1.9	1	11/08/16 13:41	11/08/16 17:07	156-59-2	2c
trans-1,2-Dichloroethene	**5.3 U**	ug/kg	5.3	3.1	1	11/08/16 13:41	11/08/16 17:07	156-60-5	2c

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ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: voc2 **Lab ID: 30200676004** Collected: 10/25/16 09:12 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV 5035 Low Level	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
1,2-Dichloropropane	**5.3 U**	ug/kg	5.3	1.3	1	11/08/16 13:41	11/08/16 17:07	78-87-5	2c
1,3-Dichloropropane	**5.3 U**	ug/kg	5.3	1.0	1	11/08/16 13:41	11/08/16 17:07	142-28-9	2c
2,2-Dichloropropane	**5.3 U**	ug/kg	5.3	2.1	1	11/08/16 13:41	11/08/16 17:07	594-20-7	2c
1,1-Dichloropropene	**5.3 U**	ug/kg	5.3	3.1	1	11/08/16 13:41	11/08/16 17:07	563-58-6	2c
cis-1,3-Dichloropropene	**5.3 U**	ug/kg	5.3	1.4	1	11/08/16 13:41	11/08/16 17:07	10061-01-5	2c
trans-1,3-Dichloropropene	**5.3 U**	ug/kg	5.3	1.1	1	11/08/16 13:41	11/08/16 17:07	10061-02-6	2c
Diethyl ether (Ethyl ether)	**5.3 U**	ug/kg	5.3	2.2	1	11/08/16 13:41	11/08/16 17:07	60-29-7	2c
Diisopropyl ether	**5.3 U**	ug/kg	5.3	3.3	1	11/08/16 13:41	11/08/16 17:07	108-20-3	2c
1,4-Dioxane (p-Dioxane)	**105 U**	ug/kg	105	54.0	1	11/08/16 13:41	11/08/16 17:07	123-91-1	2c
Ethanol	**211 U**	ug/kg	211	59.8	1	11/08/16 13:41	11/08/16 17:07	64-17-5	2c
Ethyl acetate	**5.3 U**	ug/kg	5.3	2.2	1	11/08/16 13:41	11/08/16 17:07	141-78-6	2c
Ethylbenzene	**5.3 U**	ug/kg	5.3	1.1	1	11/08/16 13:41	11/08/16 17:07	100-41-4	2c
Ethyl methacrylate	**5.3 U**	ug/kg	5.3	1.0	1	11/08/16 13:41	11/08/16 17:07	97-63-2	2c
Ethyl-tert-butyl ether	**5.3 U**	ug/kg	5.3	2.7	1	11/08/16 13:41	11/08/16 17:07	637-92-3	2c
Hexachloro-1,3-butadiene	**5.3 U**	ug/kg	5.3	2.6	1	11/08/16 13:41	11/08/16 17:07	87-68-3	2c
n-Hexane	**18.4**	ug/kg	10.5	9.4	1	11/08/16 13:41	11/08/16 17:07	110-54-3	2c
2-Hexanone	**10.5 U**	ug/kg	10.5	1.5	1	11/08/16 13:41	11/08/16 17:07	591-78-6	2c
Iodomethane	**52.7 U**	ug/kg	52.7	9.6	1	11/08/16 13:41	11/08/16 17:07	74-88-4	2c
Isobutanol	**52.7 U**	ug/kg	52.7	48.9	1	11/08/16 13:41	11/08/16 17:07	78-83-1	2c
Isopropylbenzene (Cumene)	**5.3 U**	ug/kg	5.3	1.8	1	11/08/16 13:41	11/08/16 17:07	98-82-8	2c
p-Isopropyltoluene	**5.3 U**	ug/kg	5.3	2.2	1	11/08/16 13:41	11/08/16 17:07	99-87-6	2c
Methacrylonitrile	**5.3 U**	ug/kg	5.3	1.4	1	11/08/16 13:41	11/08/16 17:07	126-98-7	2c
Methyl acetate	**52.7 U**	ug/kg	52.7	2.3	1	11/08/16 13:41	11/08/16 17:07	79-20-9	2c
Methylcyclohexane	**10.5 U**	ug/kg	10.5	3.4	1	11/08/16 13:41	11/08/16 17:07	108-87-2	2c
Methylene Chloride	**5.4**	ug/kg	5.3	3.8	1	11/08/16 13:41	11/08/16 17:07	75-09-2	2c
Methyl methacrylate	**5.3 U**	ug/kg	5.3	1.2	1	11/08/16 13:41	11/08/16 17:07	80-62-6	2c
2-Methylnaphthalene	**5.3 U**	ug/kg	5.3	2.0	1	11/08/16 13:41	11/08/16 17:07	91-57-6	2c,N2
4-Methyl-2-pentanone (MIBK)	**10.5 U**	ug/kg	10.5	1.8	1	11/08/16 13:41	11/08/16 17:07	108-10-1	2c
Methyl-tert-butyl ether	**5.3 U**	ug/kg	5.3	2.6	1	11/08/16 13:41	11/08/16 17:07	1634-04-4	2c
Naphthalene	**5.3 U**	ug/kg	5.3	1.0	1	11/08/16 13:41	11/08/16 17:07	91-20-3	2c
2-Nitropropane	**52.7 U**	ug/kg	52.7	20.5	1	11/08/16 13:41	11/08/16 17:07	79-46-9	2c
Propionitrile	**5.3 U**	ug/kg	5.3	4.3	1	11/08/16 13:41	11/08/16 17:07	107-12-0	2c
n-Propylbenzene	**5.3 U**	ug/kg	5.3	1.8	1	11/08/16 13:41	11/08/16 17:07	103-65-1	2c
Styrene	**5.3 U**	ug/kg	5.3	1.2	1	11/08/16 13:41	11/08/16 17:07	100-42-5	2c
1,1,1,2-Tetrachloroethane	**5.3 U**	ug/kg	5.3	1.2	1	11/08/16 13:41	11/08/16 17:07	630-20-6	2c
1,1,2,2-Tetrachloroethane	**5.3 U**	ug/kg	5.3	1.5	1	11/08/16 13:41	11/08/16 17:07	79-34-5	2c
Tetrachloroethene	**5.3 U**	ug/kg	5.3	3.1	1	11/08/16 13:41	11/08/16 17:07	127-18-4	2c
Tetrahydrofuran	**5.3 U**	ug/kg	5.3	4.6	1	11/08/16 13:41	11/08/16 17:07	109-99-9	2c
Toluene	**5.3 U**	ug/kg	5.3	1.6	1	11/08/16 13:41	11/08/16 17:07	108-88-3	2c
1,2,3-Trichlorobenzene	**5.3 U**	ug/kg	5.3	1.1	1	11/08/16 13:41	11/08/16 17:07	87-61-6	2c
1,2,4-Trichlorobenzene	**5.3 U**	ug/kg	5.3	1.7	1	11/08/16 13:41	11/08/16 17:07	120-82-1	2c
1,3,5-Trichlorobenzene	**5.3 U**	ug/kg	5.3	5.3	1	11/08/16 13:41	11/08/16 17:07	108-70-3	2c,L3
1,1,1-Trichloroethane	**5.3 U**	ug/kg	5.3	2.2	1	11/08/16 13:41	11/08/16 17:07	71-55-6	2c
1,1,2-Trichloroethane	**5.3 U**	ug/kg	5.3	1.2	1	11/08/16 13:41	11/08/16 17:07	79-00-5	2c
Trichloroethene	**5.3 U**	ug/kg	5.3	2.3	1	11/08/16 13:41	11/08/16 17:07	79-01-6	2c

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ANALYTICAL RESULTS

Project: Prologis RCA
Pace Project No.: 30200676

Sample: voc2 **Lab ID: 30200676004** Collected: 10/25/16 09:12 Received: 10/26/16 10:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV 5035 Low Level	Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Trichlorofluoromethane	**5.3 U**	ug/kg	5.3	3.2	1	11/08/16 13:41	11/08/16 17:07	75-69-4	2c
1,2,3-Trichloropropane	**5.3 U**	ug/kg	5.3	1.6	1	11/08/16 13:41	11/08/16 17:07	96-18-4	2c
1,1,2-Trichlorotrifluoroethane	**52.7 U**	ug/kg	52.7	3.8	1	11/08/16 13:41	11/08/16 17:07	76-13-1	2c
1,2,4-Trimethylbenzene	**5.3 U**	ug/kg	5.3	1.5	1	11/08/16 13:41	11/08/16 17:07	95-63-6	2c
1,3,5-Trimethylbenzene	**5.3 U**	ug/kg	5.3	1.8	1	11/08/16 13:41	11/08/16 17:07	108-67-8	2c
Vinyl acetate	**52.7 U**	ug/kg	52.7	3.0	1	11/08/16 13:41	11/08/16 17:07	108-05-4	2c
Vinyl chloride	**5.3 U**	ug/kg	5.3	3.0	1	11/08/16 13:41	11/08/16 17:07	75-01-4	2c
Xylene (Total)	**15.8 U**	ug/kg	15.8	3.0	1	11/08/16 13:41	11/08/16 17:07	1330-20-7	
m&p-Xylene	**10.5 U**	ug/kg	10.5	2.0	1	11/08/16 13:41	11/08/16 17:07	179601-23-1	2c
o-Xylene	**5.3 U**	ug/kg	5.3	1.0	1	11/08/16 13:41	11/08/16 17:07	95-47-6	2c
Surrogates									
Toluene-d8 (S)	105	%	68-135		1	11/08/16 13:41	11/08/16 17:07	2037-26-5	
4-Bromofluorobenzene (S)	108	%	65-146		1	11/08/16 13:41	11/08/16 17:07	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	69-137		1	11/08/16 13:41	11/08/16 17:07	17060-07-0	
Dibromofluoromethane (S)	102	%	70-130		1	11/08/16 13:41	11/08/16 17:07	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**7.4**	%	0.10	0.10	1		11/08/16 17:57		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 239486 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 30200676001, 30200676002

METHOD BLANK: 1176948 | Matrix: Water
Associated Lab Samples: 30200676001, 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	1.0 U	1.0	0.046	11/08/16 21:37	

METHOD BLANK: 1176357 | Matrix: Water
Associated Lab Samples: 30200676001, 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	1.0 U	1.0	0.046	11/08/16 21:40	

METHOD BLANK: 1176358 | Matrix: Water
Associated Lab Samples: 30200676001, 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	1.0 U	1.0	0.046	11/08/16 21:41	

LABORATORY CONTROL SAMPLE: 1176949

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	1.0	101	85-115	

MATRIX SPIKE SAMPLE: 1176951

Parameter	Units	30200732001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	0.000046U mg/L	2.5	2.4	95	75-125	

SAMPLE DUPLICATE: 1176950

Parameter	Units	30200732001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	ug/L	0.000046U mg/L	1.0 U		20	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 239528 Analysis Method: EPA 7471A
QC Batch Method: EPA 7471A Analysis Description: 7471 Mercury
Associated Lab Samples: 30200676001, 30200676002

METHOD BLANK: 1177061 Matrix: Solid
Associated Lab Samples: 30200676001, 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	0.10 U	0.10	0.0017	11/09/16 01:42	

LABORATORY CONTROL SAMPLE: 1177062

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.042	0.040J	97	85-115	

MATRIX SPIKE SAMPLE: 1177064

Parameter	Units	30201300001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	ND	.11	0.14	92	80-120	

SAMPLE DUPLICATE: 1177063

Parameter	Units	30201300001 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/kg	ND	0.038J		20	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 239343 Analysis Method: EPA 6010B
QC Batch Method: EPA 3050B Analysis Description: 6010 MET
Associated Lab Samples: 30200676001, 30200676002

METHOD BLANK: 1176481 Matrix: Solid
Associated Lab Samples: 30200676001, 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/kg	0.60 U	0.60	0.32	11/08/16 18:01	
Arsenic	mg/kg	0.50 U	0.50	0.44	11/08/16 18:01	
Beryllium	mg/kg	0.20 U	0.20	0.037	11/08/16 18:01	
Cadmium	mg/kg	0.053J	0.30	0.030	11/08/16 18:01	
Chromium	mg/kg	0.50 U	0.50	0.073	11/08/16 18:01	
Copper	mg/kg	1.0 U	1.0	0.34	11/08/16 18:01	
Lead	mg/kg	0.50 U	0.50	0.48	11/08/16 18:01	
Nickel	mg/kg	2.0 U	2.0	0.23	11/08/16 18:01	
Selenium	mg/kg	0.46J	0.80	0.46	11/08/16 18:01	
Silver	mg/kg	0.60 U	0.60	0.14	11/08/16 18:01	
Thallium	mg/kg	2.0 U	2.0	0.86	11/08/16 18:01	
Zinc	mg/kg	0.12J	1.0	0.070	11/08/16 18:01	

LABORATORY CONTROL SAMPLE: 1176482

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	50	49.6	99	80-120	
Arsenic	mg/kg	50	46.3	93	80-120	
Beryllium	mg/kg	50	50.1	100	80-120	
Cadmium	mg/kg	50	49.0	98	80-120	
Chromium	mg/kg	50	49.8	100	80-120	
Copper	mg/kg	50	49.2	98	80-120	
Lead	mg/kg	50	45.9	92	80-120	
Nickel	mg/kg	50	49.4	99	80-120	
Selenium	mg/kg	50	48.1	96	80-120	
Silver	mg/kg	25	23.5	94	80-120	
Thallium	mg/kg	50	45.5	91	80-120	
Zinc	mg/kg	50	48.9	98	80-120	

MATRIX SPIKE SAMPLE: 1176484

Parameter	Units	30201416001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	ND	49.6	19.9	40	75-125	M1
Arsenic	mg/kg	16.0	49.6	58.3	85	75-125	
Beryllium	mg/kg	0.52	49.6	48.0	96	75-125	
Cadmium	mg/kg	ND	49.6	46.7	94	75-125	
Chromium	mg/kg	11.3	49.6	57.4	93	75-125	
Copper	mg/kg	20.5	49.6	66.7	93	75-125	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

MATRIX SPIKE SAMPLE: 1176484

Parameter	Units	30201416001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	13.0	49.6	62.0	99	75-125	
Nickel	mg/kg	19.5	49.6	61.8	85	75-125	
Selenium	mg/kg	0.83	49.6	44.8	89	75-125	
Silver	mg/kg	ND	24.9	22.2	90	75-125	
Thallium	mg/kg	ND	49.6	42.5	86	75-125	
Zinc	mg/kg	61.2	49.6	102	83	75-125	

SAMPLE DUPLICATE: 1176483

Parameter	Units	30201416001 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	mg/kg	ND	0.59 U		20	
Arsenic	mg/kg	16.0	19.5	20	20	
Beryllium	mg/kg	0.52	0.51	1	20	
Cadmium	mg/kg	ND	0.29 U		20	
Chromium	mg/kg	11.3	11.7	3	20	
Copper	mg/kg	20.5	22.2	8	20	
Lead	mg/kg	13.0	15.0	14	20	
Nickel	mg/kg	19.5	21.1	8	20	
Selenium	mg/kg	0.83	1.0	19	20	
Silver	mg/kg	ND	0.59 U		20	
Thallium	mg/kg	ND	2.0 U		20	
Zinc	mg/kg	61.2	60.1	2	20	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 239390 Analysis Method: EPA 6010B
QC Batch Method: EPA 3005A Analysis Description: 6010 MET TCLP
Associated Lab Samples: 30200676001, 30200676002

METHOD BLANK: 1176624 Matrix: Water
Associated Lab Samples: 30200676001, 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	0.050 U	0.050	0.0040	11/08/16 09:49	
Barium	mg/L	1.0 U	1.0	0.00053	11/08/16 09:49	
Cadmium	mg/L	0.050 U	0.050	0.00034	11/08/16 09:49	
Chromium	mg/L	0.050 U	0.050	0.00053	11/08/16 09:49	
Lead	mg/L	0.050 U	0.050	0.0040	11/08/16 09:49	
Selenium	mg/L	0.10 U	0.10	0.0044	11/08/16 09:49	
Silver	mg/L	0.050 U	0.050	0.00056	11/08/16 09:49	

METHOD BLANK: 1176357 Matrix: Water
Associated Lab Samples: 30200676001, 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	0.013J	0.050	0.0040	11/08/16 09:57	
Barium	mg/L	0.030J	1.0	0.00053	11/08/16 09:57	
Cadmium	mg/L	0.050 U	0.050	0.00034	11/08/16 09:57	
Chromium	mg/L	0.0043J	0.050	0.00053	11/08/16 09:57	
Lead	mg/L	0.0045J	0.050	0.0040	11/08/16 09:57	
Selenium	mg/L	0.0088J	0.10	0.0044	11/08/16 09:57	
Silver	mg/L	0.050 U	0.050	0.00056	11/08/16 09:57	

METHOD BLANK: 1176358 Matrix: Water
Associated Lab Samples: 30200676001, 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	0.0095J	0.050	0.0040	11/08/16 09:54	
Barium	mg/L	0.054J	1.0	0.00053	11/08/16 09:54	
Cadmium	mg/L	0.050 U	0.050	0.00034	11/08/16 09:54	
Chromium	mg/L	0.0022J	0.050	0.00053	11/08/16 09:54	
Lead	mg/L	0.050 U	0.050	0.0040	11/08/16 09:54	
Selenium	mg/L	0.011J	0.10	0.0044	11/08/16 09:54	
Silver	mg/L	0.050 U	0.050	0.00056	11/08/16 09:54	

LABORATORY CONTROL SAMPLE: 1176625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	.5	0.48	97	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

LABORATORY CONTROL SAMPLE: 1176625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	mg/L	.5	0.51J	102	80-120	
Cadmium	mg/L	.5	0.51	101	80-120	
Chromium	mg/L	.5	0.51	102	80-120	
Lead	mg/L	.5	0.49	97	80-120	
Selenium	mg/L	.5	0.51	102	80-120	
Silver	mg/L	.25	0.26	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1176627 1176628

Parameter	Units	30200732001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	0.0076J	.5	.5	0.62	0.62	122	123	75-125	1	20	
Barium	mg/L	0.085J	.5	.5	0.58J	0.59J	100	100	75-125		20	
Cadmium	mg/L	0.00034U	.5	.5	0.62	0.63	124	126	75-125	1	20	M1
Chromium	mg/L	0.27	.5	.5	0.76	0.78	97	101	75-125	2	20	
Lead	mg/L	0.0040U	.5	.5	0.48	0.49	97	97	75-125	1	20	
Selenium	mg/L	0.018J	.5	.5	0.68	0.68	133	132	75-125	1	20	M1
Silver	mg/L	0.00056U	.25	.25	0.33	0.34	133	136	75-125	2	20	M1

SAMPLE DUPLICATE: 1176626

Parameter	Units	30200732001 Result	Dup Result	RPD	Max RPD	Qualifiers
Arsenic	mg/L	0.0076J	0.0058J		20	
Barium	mg/L	0.085J	0.076J		20	
Cadmium	mg/L	0.00034U	0.050 U		20	
Chromium	mg/L	0.27	0.28	2	20	
Lead	mg/L	0.0040U	0.050 U		20	
Selenium	mg/L	0.018J	0.014J		20	
Silver	mg/L	0.00056U	0.00057J		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 239554 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035A Analysis Description: 8260B MSV 5035 Low
Associated Lab Samples: 30200676003, 30200676004

METHOD BLANK: 1177185 Matrix: Solid
Associated Lab Samples: 30200676003, 30200676004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	5.0 U	5.0	1.2	11/08/16 13:50	
1,1,1-Trichloroethane	ug/kg	5.0 U	5.0	2.1	11/08/16 13:50	
1,1,2,2-Tetrachloroethane	ug/kg	5.0 U	5.0	1.4	11/08/16 13:50	
1,1,2-Trichloroethane	ug/kg	5.0 U	5.0	1.1	11/08/16 13:50	
1,1,2-Trichlorotrifluoroethane	ug/kg	50.0 U	50.0	3.6	11/08/16 13:50	
1,1-Dichloroethane	ug/kg	5.0 U	5.0	2.6	11/08/16 13:50	
1,1-Dichloroethene	ug/kg	5.0 U	5.0	2.9	11/08/16 13:50	
1,1-Dichloropropene	ug/kg	5.0 U	5.0	3.0	11/08/16 13:50	
1,2,3-Trichlorobenzene	ug/kg	5.0 U	5.0	1.0	11/08/16 13:50	
1,2,3-Trichloropropane	ug/kg	5.0 U	5.0	1.5	11/08/16 13:50	
1,2,4-Trichlorobenzene	ug/kg	5.0 U	5.0	1.6	11/08/16 13:50	
1,2,4-Trimethylbenzene	ug/kg	5.0 U	5.0	1.4	11/08/16 13:50	
1,2-Dibromo-3-chloropropane	ug/kg	5.0 U	5.0	2.0	11/08/16 13:50	
1,2-Dibromoethane (EDB)	ug/kg	5.0 U	5.0	1.3	11/08/16 13:50	
1,2-Dichlorobenzene	ug/kg	5.0 U	5.0	0.61	11/08/16 13:50	
1,2-Dichloroethane	ug/kg	5.0 U	5.0	1.1	11/08/16 13:50	
1,2-Dichloropropane	ug/kg	5.0 U	5.0	1.2	11/08/16 13:50	
1,3,5-Trichlorobenzene	ug/kg	5.0 U	5.0	5.0	11/08/16 13:50	
1,3,5-Trimethylbenzene	ug/kg	5.0 U	5.0	1.7	11/08/16 13:50	
1,3-Dichlorobenzene	ug/kg	5.0 U	5.0	0.78	11/08/16 13:50	
1,3-Dichloropropane	ug/kg	5.0 U	5.0	0.97	11/08/16 13:50	
1,4-Dichlorobenzene	ug/kg	5.0 U	5.0	0.85	11/08/16 13:50	
1,4-Dioxane (p-Dioxane)	ug/kg	100 U	100	51.2	11/08/16 13:50	
2,2-Dichloropropane	ug/kg	5.0 U	5.0	2.0	11/08/16 13:50	
2-Butanone (MEK)	ug/kg	10.0 U	10.0	2.1	11/08/16 13:50	
2-Chloroethylvinyl ether	ug/kg	10.0 U	10.0	4.2	11/08/16 13:50	
2-Chlorotoluene	ug/kg	5.0 U	5.0	1.4	11/08/16 13:50	
2-Hexanone	ug/kg	10.0 U	10.0	1.4	11/08/16 13:50	
2-Methylnaphthalene	ug/kg	5.0 U	5.0	1.9	11/08/16 13:50	N2
2-Nitropropane	ug/kg	50.0 U	50.0	19.4	11/08/16 13:50	
4-Chlorotoluene	ug/kg	5.0 U	5.0	1.3	11/08/16 13:50	
4-Methyl-2-pentanone (MIBK)	ug/kg	10.0 U	10.0	1.7	11/08/16 13:50	
Acetone	ug/kg	10.0 U	10.0	4.9	11/08/16 13:50	
Acetonitrile	ug/kg	50.0 U	50.0	22.7	11/08/16 13:50	
Acrolein	ug/kg	50.0 U	50.0	7.0	11/08/16 13:50	
Acrylonitrile	ug/kg	5.0 U	5.0	3.0	11/08/16 13:50	
Allyl chloride	ug/kg	50.0 U	50.0	14.2	11/08/16 13:50	
Benzene	ug/kg	5.0 U	5.0	1.4	11/08/16 13:50	
Bromobenzene	ug/kg	5.0 U	5.0	1.6	11/08/16 13:50	
Bromochloromethane	ug/kg	5.0 U	5.0	1.7	11/08/16 13:50	
Bromodichloromethane	ug/kg	5.0 U	5.0	1.3	11/08/16 13:50	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

METHOD BLANK: 1177185 Matrix: Solid
Associated Lab Samples: 30200676003, 30200676004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Bromoform	ug/kg	5.0 U	5.0	4.1	11/08/16 13:50	
Bromomethane	ug/kg	5.0 U	5.0	4.4	11/08/16 13:50	
Carbon disulfide	ug/kg	5.0 U	5.0	2.9	11/08/16 13:50	
Carbon tetrachloride	ug/kg	5.0 U	5.0	4.4	11/08/16 13:50	
Chlorobenzene	ug/kg	5.0 U	5.0	0.68	11/08/16 13:50	
Chloroethane	ug/kg	5.0 U	5.0	1.9	11/08/16 13:50	
Chloroform	ug/kg	5.0 U	5.0	2.7	11/08/16 13:50	
Chloromethane	ug/kg	5.0 U	5.0	2.5	11/08/16 13:50	
Chloroprene	ug/kg	5.0 U	5.0	2.7	11/08/16 13:50	
cis-1,2-Dichloroethene	ug/kg	5.0 U	5.0	1.8	11/08/16 13:50	
cis-1,3-Dichloropropene	ug/kg	5.0 U	5.0	1.3	11/08/16 13:50	
Cyclohexane	ug/kg	10.0 U	10.0	3.4	11/08/16 13:50	
Cyclohexanone	ug/kg	50.0 U	50.0	6.7	11/08/16 13:50	
Dibromochloromethane	ug/kg	5.0 U	5.0	1.5	11/08/16 13:50	
Dibromomethane	ug/kg	5.0 U	5.0	1.0	11/08/16 13:50	
Dichlorodifluoromethane	ug/kg	5.0 U	5.0	3.6	11/08/16 13:50	
Diethyl ether (Ethyl ether)	ug/kg	5.0 U	5.0	2.1	11/08/16 13:50	
Diisopropyl ether	ug/kg	5.0 U	5.0	3.1	11/08/16 13:50	
Ethanol	ug/kg	200 U	200	56.7	11/08/16 13:50	
Ethyl acetate	ug/kg	5.0 U	5.0	2.0	11/08/16 13:50	
Ethyl methacrylate	ug/kg	5.0 U	5.0	0.99	11/08/16 13:50	
Ethyl-tert-butyl ether	ug/kg	5.0 U	5.0	2.5	11/08/16 13:50	
Ethylbenzene	ug/kg	5.0 U	5.0	1.0	11/08/16 13:50	
Hexachloro-1,3-butadiene	ug/kg	5.0 U	5.0	2.4	11/08/16 13:50	
Iodomethane	ug/kg	50.0 U	50.0	9.2	11/08/16 13:50	
Isobutanol	ug/kg	50.0 U	50.0	46.4	11/08/16 13:50	
Isopropylbenzene (Cumene)	ug/kg	5.0 U	5.0	1.7	11/08/16 13:50	
m&p-Xylene	ug/kg	10.0 U	10.0	1.8	11/08/16 13:50	
Methacrylonitrile	ug/kg	5.0 U	5.0	1.3	11/08/16 13:50	
Methyl acetate	ug/kg	50.0 U	50.0	2.1	11/08/16 13:50	
Methyl methacrylate	ug/kg	5.0 U	5.0	1.1	11/08/16 13:50	
Methyl-tert-butyl ether	ug/kg	5.0 U	5.0	2.4	11/08/16 13:50	
Methylcyclohexane	ug/kg	10.0 U	10.0	3.2	11/08/16 13:50	
Methylene Chloride	ug/kg	5.0 U	5.0	3.6	11/08/16 13:50	
n-Butylbenzene	ug/kg	5.0 U	5.0	2.4	11/08/16 13:50	
n-Hexane	ug/kg	10.0 U	10.0	8.9	11/08/16 13:50	
n-Propylbenzene	ug/kg	5.0 U	5.0	1.8	11/08/16 13:50	
Naphthalene	ug/kg	5.0 U	5.0	0.97	11/08/16 13:50	
o-Xylene	ug/kg	5.0 U	5.0	0.99	11/08/16 13:50	
p-Isopropyltoluene	ug/kg	5.0 U	5.0	2.1	11/08/16 13:50	
Propionitrile	ug/kg	5.0 U	5.0	4.1	11/08/16 13:50	
sec-Butylbenzene	ug/kg	5.0 U	5.0	2.5	11/08/16 13:50	
Styrene	ug/kg	5.0 U	5.0	1.1	11/08/16 13:50	
tert-Amylmethyl ether	ug/kg	5.0 U	5.0	0.92	11/08/16 13:50	
tert-Butyl Alcohol	ug/kg	50.0 U	50.0	13.9	11/08/16 13:50	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

METHOD BLANK: 1177185 Matrix: Solid
Associated Lab Samples: 30200676003, 30200676004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
tert-Butylbenzene	ug/kg	5.0 U	5.0	2.4	11/08/16 13:50	
Tetrachloroethene	ug/kg	5.0 U	5.0	2.9	11/08/16 13:50	
Tetrahydrofuran	ug/kg	5.0 U	5.0	4.4	11/08/16 13:50	
Toluene	ug/kg	5.0 U	5.0	1.6	11/08/16 13:50	
TOTAL BTEX	ug/kg	30.0 U	30.0	6.8	11/08/16 13:50	
trans-1,2-Dichloroethene	ug/kg	5.0 U	5.0	2.9	11/08/16 13:50	
trans-1,3-Dichloropropene	ug/kg	5.0 U	5.0	1.0	11/08/16 13:50	
trans-1,4-Dichloro-2-butene	ug/kg	5.0 U	5.0	0.98	11/08/16 13:50	
Trichloroethene	ug/kg	5.0 U	5.0	2.2	11/08/16 13:50	
Trichlorofluoromethane	ug/kg	5.0 U	5.0	3.1	11/08/16 13:50	
Vinyl acetate	ug/kg	50.0 U	50.0	2.8	11/08/16 13:50	
Vinyl chloride	ug/kg	5.0 U	5.0	2.9	11/08/16 13:50	
Xylene (Total)	ug/kg	15.0 U	15.0	2.8	11/08/16 13:50	
1,2-Dichloroethane-d4 (S)	%	103	69-137		11/08/16 13:50	
4-Bromofluorobenzene (S)	%	101	65-146		11/08/16 13:50	
Dibromofluoromethane (S)	%	102	70-130		11/08/16 13:50	
Toluene-d8 (S)	%	100	68-135		11/08/16 13:50	

LABORATORY CONTROL SAMPLE: 1177186

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	20	19.0	95	59-126	
1,1,1-Trichloroethane	ug/kg	20	18.7	93	71-130	
1,1,2,2-Tetrachloroethane	ug/kg	20	18.6	93	66-123	
1,1,2-Trichloroethane	ug/kg	20	19.3	96	75-115	
1,1,2-Trichlorotrifluoroethane	ug/kg	20	9.9J	50	21-175	
1,1-Dichloroethane	ug/kg	20	19.0	95	65-126	
1,1-Dichloroethene	ug/kg	20	19.4	97	62-137	
1,1-Dichloropropene	ug/kg	20	18.6	93	50-144	
1,2,3-Trichlorobenzene	ug/kg	20	19.1	96	65-135	
1,2,3-Trichloropropane	ug/kg	20	19.6	98	63-120	
1,2,4-Trichlorobenzene	ug/kg	20	19.6	98	78-137	
1,2,4-Trimethylbenzene	ug/kg	20	18.9	94	79-125	
1,2-Dibromo-3-chloropropane	ug/kg	20	19.1	95	21-150	
1,2-Dibromoethane (EDB)	ug/kg	20	19.9	100	74-118	
1,2-Dichlorobenzene	ug/kg	20	19.3	97	82-121	
1,2-Dichloroethane	ug/kg	20	18.6	93	67-116	
1,2-Dichloropropane	ug/kg	20	18.9	94	67-119	
1,3,5-Trichlorobenzene	ug/kg	10	19.0	190	70-130	L0
1,3,5-Trimethylbenzene	ug/kg	20	19.0	95	74-129	
1,3-Dichlorobenzene	ug/kg	20	18.8	94	80-124	
1,3-Dichloropropane	ug/kg	20	20.1	100	65-121	
1,4-Dichlorobenzene	ug/kg	20	19.3	97	80-126	
1,4-Dioxane (p-Dioxane)	ug/kg	200	90.5J	45	40-132	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

LABORATORY CONTROL SAMPLE: 1177186

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,2-Dichloropropane	ug/kg	20	18.9	95	32-155	
2-Butanone (MEK)	ug/kg	20	17.5	88	42-116	
2-Chloroethylvinyl ether	ug/kg	20	18.8	94	16-145	
2-Chlorotoluene	ug/kg	20	19.4	97	62-131	
2-Hexanone	ug/kg	20	23.2	116	54-121	
2-Methylnaphthalene	ug/kg	20	20.3	102	44-151	N2
2-Nitropropane	ug/kg	100	71.7	72	70-130	
4-Chlorotoluene	ug/kg	20	18.3	91	58-131	
4-Methyl-2-pentanone (MIBK)	ug/kg	20	15.9	80	52-119	
Acetone	ug/kg	20	17.2	86	32-113	
Acetonitrile	ug/kg	100	97.9	98	29-144	
Acrolein	ug/kg	20	22.7J	113	70-130	
Acrylonitrile	ug/kg	20	24.5	122	37-137	
Allyl chloride	ug/kg	100	85.8	86	40-166	
Benzene	ug/kg	20	19.5	98	71-137	
Bromobenzene	ug/kg	20	18.6	93	52-135	
Bromochloromethane	ug/kg	20	18.9	94	63-127	
Bromodichloromethane	ug/kg	20	19.6	98	67-121	
Bromoform	ug/kg	20	17.7	88	58-122	
Bromomethane	ug/kg	20	20.6	103	27-164	
Carbon disulfide	ug/kg	20	15.7	79	60-172	
Carbon tetrachloride	ug/kg	20	18.6	93	66-132	
Chlorobenzene	ug/kg	20	18.9	95	80-119	
Chloroethane	ug/kg	20	18.4	92	53-149	
Chloroform	ug/kg	20	19.6	98	70-120	
Chloromethane	ug/kg	20	19.4	97	47-147	
Chloroprene	ug/kg	20	15.9	80	70-130	
cis-1,2-Dichloroethene	ug/kg	20	18.8	94	64-120	
cis-1,3-Dichloropropene	ug/kg	20	18.0	90	67-123	
Cyclohexane	ug/kg	20	15.3	77	45-190	
Cyclohexanone	ug/kg	100	72.4	72	10-120	
Dibromochloromethane	ug/kg	20	18.8	94	67-120	
Dibromomethane	ug/kg	20	19.8	99	54-123	
Dichlorodifluoromethane	ug/kg	20	17.4	87	10-175	
Diethyl ether (Ethyl ether)	ug/kg	20	15.6	78	57-124	
Diisopropyl ether	ug/kg	20	17.3	86	47-126	
Ethanol	ug/kg	200	187J	94	23-168	
Ethyl acetate	ug/kg	20	11.8	59	10-169	
Ethyl methacrylate	ug/kg	20	14.9	75	10-125	
Ethyl-tert-butyl ether	ug/kg	20	19.5	98	49-122	
Ethylbenzene	ug/kg	20	18.5	93	78-126	
Hexachloro-1,3-butadiene	ug/kg	20	17.8	89	52-156	
Iodomethane	ug/kg	20	12.1J	61	28-144	
Isobutanol	ug/kg	100	87.4	87	24-137	
Isopropylbenzene (Cumene)	ug/kg	20	19.0	95	78-133	
m&p-Xylene	ug/kg	40	39.1	98	77-129	
Methacrylonitrile	ug/kg	20	17.4	87	41-118	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

LABORATORY CONTROL SAMPLE: 1177186

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methyl acetate	ug/kg	20	15.9J	79	50-130	
Methyl methacrylate	ug/kg	20	14.1	70	23-167	
Methyl-tert-butyl ether	ug/kg	20	17.0	85	77-141	
Methylcyclohexane	ug/kg	20	14.7	73	31-175	
Methylene Chloride	ug/kg	20	13.0	65	50-125	
n-Butylbenzene	ug/kg	20	18.9	95	74-140	
n-Hexane	ug/kg	20	15.2	76	10-175	
n-Propylbenzene	ug/kg	20	19.0	95	70-140	
Naphthalene	ug/kg	20	19.3	96	81-126	
o-Xylene	ug/kg	20	19.0	95	80-125	
p-Isopropyltoluene	ug/kg	20	19.3	97	74-136	
Propionitrile	ug/kg	20	18.0	90	64-121	
sec-Butylbenzene	ug/kg	20	19.2	96	81-132	
Styrene	ug/kg	20	18.9	95	79-130	
tert-Amylmethyl ether	ug/kg	20	13.9	69	50-117	
tert-Butyl Alcohol	ug/kg	100	103	103	45-134	
tert-Butylbenzene	ug/kg	20	18.7	94	77-129	
Tetrachloroethene	ug/kg	20	19.5	98	73-135	
Tetrahydrofuran	ug/kg	20	16.1	81	31-138	
Toluene	ug/kg	20	20.0	100	72-127	
TOTAL BTEX	ug/kg		116			
trans-1,2-Dichloroethene	ug/kg	20	19.3	96	64-131	
trans-1,3-Dichloropropene	ug/kg	20	17.5	88	66-116	
trans-1,4-Dichloro-2-butene	ug/kg	20	13.6	68	25-117	
Trichloroethene	ug/kg	20	19.0	95	73-125	
Trichlorofluoromethane	ug/kg	20	19.2	96	39-192	
Vinyl acetate	ug/kg	20	23.1J	116	10-175	
Vinyl chloride	ug/kg	20	17.0	85	46-138	
Xylene (Total)	ug/kg	60	58.0	97	80-124	
1,2-Dichloroethane-d4 (S)	%			101	69-137	
4-Bromofluorobenzene (S)	%			98	65-146	
Dibromofluoromethane (S)	%			101	70-130	
Toluene-d8 (S)	%			102	68-135	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 239093 — Analysis Method: EPA 8081A
QC Batch Method: EPA 3546 — Analysis Description: 8081 GCS Pesticides
Associated Lab Samples: 30200676002

METHOD BLANK: 1174936 — Matrix: Solid
Associated Lab Samples: 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
4,4'-DDD	ug/kg	3.3 U	3.3	0.36	11/08/16 22:53	
4,4'-DDE	ug/kg	3.3 U	3.3	1.7	11/08/16 22:53	
4,4'-DDT	ug/kg	3.3 U	3.3	0.41	11/08/16 22:53	
Aldrin	ug/kg	1.7 U	1.7	0.23	11/08/16 22:53	
alpha-BHC	ug/kg	1.7 U	1.7	0.17	11/08/16 22:53	
alpha-Chlordane	ug/kg	1.7 U	1.7	0.18	11/08/16 22:53	
beta-BHC	ug/kg	1.7 U	1.7	0.26	11/08/16 22:53	
delta-BHC	ug/kg	1.7 U	1.7	0.24	11/08/16 22:53	
Dieldrin	ug/kg	3.3 U	3.3	0.33	11/08/16 22:53	
Endosulfan I	ug/kg	1.7 U	1.7	0.16	11/08/16 22:53	
Endosulfan II	ug/kg	3.3 U	3.3	0.32	11/08/16 22:53	
Endosulfan sulfate	ug/kg	3.3 U	3.3	0.36	11/08/16 22:53	
Endrin	ug/kg	3.3 U	3.3	0.36	11/08/16 22:53	
Endrin aldehyde	ug/kg	3.3 U	3.3	0.47	11/08/16 22:53	
Endrin ketone	ug/kg	3.3 U	3.3	0.33	11/08/16 22:53	
gamma-BHC (Lindane)	ug/kg	1.7 U	1.7	0.19	11/08/16 22:53	
gamma-Chlordane	ug/kg	1.7 U	1.7	0.19	11/08/16 22:53	
Heptachlor	ug/kg	1.7 U	1.7	0.21	11/08/16 22:53	
Heptachlor epoxide	ug/kg	1.7 U	1.7	0.17	11/08/16 22:53	
Methoxychlor	ug/kg	16.7 U	16.7	2.6	11/08/16 22:53	
Toxaphene	ug/kg	16.7 U	16.7	1.5	11/08/16 22:53	
Decachlorobiphenyl (S)	%	83	39-122		11/08/16 22:53	
Tetrachloro-m-xylene (S)	%	72	37-113		11/08/16 22:53	

LABORATORY CONTROL SAMPLE: 1174937

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	ug/kg	26.7	23.3	87	64-119	
4,4'-DDE	ug/kg	26.7	23.1	87	50-114	
4,4'-DDT	ug/kg	26.7	23.8	89	68-118	
Aldrin	ug/kg	13.3	10.3	77	50-98	
alpha-BHC	ug/kg	13.3	10.3	77	50-105	
alpha-Chlordane	ug/kg	13.3	10.8	81	51-104	
beta-BHC	ug/kg	13.3	10.6	80	49-104	
delta-BHC	ug/kg	13.3	11.4	86	48-113	
Dieldrin	ug/kg	26.7	23.1	87	63-112	
Endosulfan I	ug/kg	13.3	10.4	78	60-108	
Endosulfan II	ug/kg	26.7	22.5	84	51-112	
Endosulfan sulfate	ug/kg	26.7	24.0	90	54-112	
Endrin	ug/kg	26.7	22.8	85	65-114	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

LABORATORY CONTROL SAMPLE: 1174937

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin aldehyde	ug/kg	26.7	22.3	84	53-145	
Endrin ketone	ug/kg	26.7	23.6	88	57-123	
gamma-BHC (Lindane)	ug/kg	13.3	10.7	80	55-112	
gamma-Chlordane	ug/kg	13.3	10.5	79	53-102	
Heptachlor	ug/kg	13.3	10.8	81	59-108	
Heptachlor epoxide	ug/kg	13.3	10.8	81	51-105	
Methoxychlor	ug/kg	133	119	89	64-116	
Decachlorobiphenyl (S)	%			80	39-122	
Tetrachloro-m-xylene (S)	%			68	37-113	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1174938 1174939

Parameter	Units	30200676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
4,4'-DDD	ug/kg	85.3	32.6	31.9	41.2	41.4	-135	-137	64-119	1	25	M6
4,4'-DDE	ug/kg	40.8 U	32.6	31.9	45.7	32.0J	84	43	50-114		25	CH,M6
4,4'-DDT	ug/kg	40.8 U	32.6	31.9	116	94.7	357	297	68-118	21	25	M6
Aldrin	ug/kg	20.4 U	16.4	16	20.1J	17.9J	123	112	50-98		25	M6
alpha-BHC	ug/kg	20.4 U	16.4	16	29.7	28.5	182	178	50-105	4	25	M6
alpha-Chlordane	ug/kg	34.3	16.4	16	45.8	41.3	71	44	51-104	11	25	M6
beta-BHC	ug/kg	31.0	16.4	16	40.9	46.4	61	97	49-104	13	25	CH
delta-BHC	ug/kg	20.4 U	16.4	16	20.9	22.0	128	138	48-113	5	25	M6
Dieldrin	ug/kg	40.8 U	32.6	31.9	55.9	58.3	171	183	63-112	4	25	M6
Endosulfan I	ug/kg	20.4 U	16.4	16	16.0J	13.6J	98	85	60-108		25	
Endosulfan II	ug/kg	40.8 U	32.6	31.9	28.7J	27.9J	88	88	51-112		25	
Endosulfan sulfate	ug/kg	40.8 U	32.6	31.9	78.0	77.4	239	243	54-112	1	25	CH,M6
Endrin	ug/kg	40.8 U	32.6	31.9	27.2J	23.7J	83	74	65-114		25	CH
Endrin aldehyde	ug/kg	40.8 U	32.6	31.9	34.8J	33.5J	107	105	53-145		25	
Endrin ketone	ug/kg	40.8 U	32.6	31.9	33.0J	28.5J	101	89	57-123		25	
gamma-BHC (Lindane)	ug/kg	20.4 U	16.4	16	16.9J	18.2J	104	114	55-112		25	M6
gamma-Chlordane	ug/kg	285	16.4	16	55.6	53.3	-1410	-1450	53-102	4	25	M6
Heptachlor	ug/kg	20.4 U	16.4	16	19.0J	19.0J	117	119	59-108		25	M6
Heptachlor epoxide	ug/kg	20.4 U	16.4	16	20.7	19.1J	127	119	51-105		25	M6
Methoxychlor	ug/kg	456	164	160	223	190J	-143	-166	64-116		25	CH,M6
Decachlorobiphenyl (S)	%						93	88	39-122			
Tetrachloro-m-xylene (S)	%						83	80	37-113			CH

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 242303 Analysis Method: EPA 8082
QC Batch Method: EPA 3546 Analysis Description: 8082 GCS PCB
Associated Lab Samples: 30200676001, 30200676002

METHOD BLANK: 1191093 Matrix: Solid
Associated Lab Samples: 30200676001, 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	16.7 U	16.7	5.7	12/06/16 21:14	
PCB-1221 (Aroclor 1221)	ug/kg	16.7 U	16.7	5.1	12/06/16 21:14	
PCB-1232 (Aroclor 1232)	ug/kg	16.7 U	16.7	8.2	12/06/16 21:14	
PCB-1242 (Aroclor 1242)	ug/kg	16.7 U	16.7	2.9	12/06/16 21:14	
PCB-1248 (Aroclor 1248)	ug/kg	16.7 U	16.7	7.7	12/06/16 21:14	
PCB-1254 (Aroclor 1254)	ug/kg	16.7 U	16.7	2.2	12/06/16 21:14	
PCB-1260 (Aroclor 1260)	ug/kg	16.7 U	16.7	1.8	12/06/16 21:14	
Decachlorobiphenyl (S)	%	45	10-115		12/06/16 21:14	CL
Tetrachloro-m-xylene (S)	%	56	30-107		12/06/16 21:14	

LABORATORY CONTROL SAMPLE: 1191094

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	167	97.6	59	40-100	
PCB-1260 (Aroclor 1260)	ug/kg	167	106	64	41-109	
Decachlorobiphenyl (S)	%			44	10-115	CL
Tetrachloro-m-xylene (S)	%			55	30-107	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1191095 1191096

Parameter	Units	30200676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	200 U	202	200	577	579	285	289	40-100	0	25	M6
PCB-1260 (Aroclor 1260)	ug/kg	558	202	200	804	730	122	86	41-109	10	25	M6
Decachlorobiphenyl (S)	%						54	35	10-115			CL
Tetrachloro-m-xylene (S)	%						47	52	30-107			

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 3451 — Analysis Method: EPA 8151A
QC Batch Method: EPA 8151A — Analysis Description: 8151 GCS Herbicides
Associated Lab Samples: 30200676001, 30200676002

METHOD BLANK: 17624 — Matrix: Solid
Associated Lab Samples: 30200676001, 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2,4,5-T	ug/kg	5.0 U	5.0	0.25	11/10/16 21:51	
2,4,5-TP (Silvex)	ug/kg	5.0 U	5.0	0.26	11/10/16 21:51	
2,4-D	ug/kg	9.9 U	9.9	0.70	11/10/16 21:51	
2,4-DCAA (S)	%.	87	29-136		11/10/16 21:51	

LABORATORY CONTROL SAMPLE: 17625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-T	ug/kg	19.8	15.4	78	16-136	
2,4,5-TP (Silvex)	ug/kg	19.8	15.6	79	12-146	
2,4-D	ug/kg	59.3	52.3	88	25-157	
2,4-DCAA (S)	%.			82	29-136	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17626 17627

Parameter	Units	703922001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2,4,5-T	ug/kg	<5.6	22.4	22.6	25.7	13.4	96	41	16-136	62	30	R1
2,4,5-TP (Silvex)	ug/kg	<5.6	22.4	22.6	22.5	12.1	100	53	12-146	60	30	R1
2,4-D	ug/kg	<11.3	67.2	67.9	56.6	30.0	84	44	25-157	61	30	R1
2,4-DCAA (S)	%.						101	33	29-136		30	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 239088 | Analysis Method: EPA 8270C
QC Batch Method: EPA 3546 | Analysis Description: 8270 Solid MSSV Microwave
Associated Lab Samples: 30200676002

METHOD BLANK: 1174917 | Matrix: Solid
Associated Lab Samples: 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/kg	333 U	333	68.2	11/08/16 22:49	
1,2,4-Trichlorobenzene	ug/kg	333 U	333	43.3	11/08/16 22:49	
1,2-Dichlorobenzene	ug/kg	333 U	333	72.1	11/08/16 22:49	
1,3-Dichlorobenzene	ug/kg	333 U	333	47.6	11/08/16 22:49	
1,4-Dichlorobenzene	ug/kg	333 U	333	10.6	11/08/16 22:49	
1-Methylnaphthalene	ug/kg	333 U	333	17.8	11/08/16 22:49	
2,3,4,6-Tetrachlorophenol	ug/kg	333 U	333	58.3	11/08/16 22:49	
2,4,5-Trichlorophenol	ug/kg	833 U	833	57.9	11/08/16 22:49	
2,4,6-Trichlorophenol	ug/kg	333 U	333	107	11/08/16 22:49	
2,4-Dichlorophenol	ug/kg	333 U	333	11.2	11/08/16 22:49	
2,4-Dimethylphenol	ug/kg	333 U	333	33.6	11/08/16 22:49	
2,4-Dinitrophenol	ug/kg	833 U	833	318	11/08/16 22:49	
2,4-Dinitrotoluene	ug/kg	333 U	333	16.1	11/08/16 22:49	
2,6-Dinitrotoluene	ug/kg	333 U	333	40.7	11/08/16 22:49	
2-Chloronaphthalene	ug/kg	333 U	333	12.2	11/08/16 22:49	
2-Chlorophenol	ug/kg	333 U	333	11.8	11/08/16 22:49	
2-Methylnaphthalene	ug/kg	333 U	333	13.7	11/08/16 22:49	
2-Methylphenol(o-Cresol)	ug/kg	333 U	333	37.8	11/08/16 22:49	
2-Nitroaniline	ug/kg	833 U	833	13.3	11/08/16 22:49	
2-Nitrophenol	ug/kg	333 U	333	17.0	11/08/16 22:49	
3&4-Methylphenol(m&p Cresol)	ug/kg	30.7J	666	11.0	11/08/16 22:49	
3,3'-Dichlorobenzidine	ug/kg	333 U	333	94.9	11/08/16 22:49	
3-Nitroaniline	ug/kg	833 U	833	83.4	11/08/16 22:49	
4,6-Dinitro-2-methylphenol	ug/kg	194J	833	64.9	11/08/16 22:49	
4-Bromophenylphenyl ether	ug/kg	333 U	333	34.0	11/08/16 22:49	
4-Chloro-3-methylphenol	ug/kg	333 U	333	27.7	11/08/16 22:49	
4-Chloroaniline	ug/kg	333 U	333	52.6	11/08/16 22:49	
4-Chlorophenylphenyl ether	ug/kg	333 U	333	49.0	11/08/16 22:49	
4-Nitroaniline	ug/kg	833 U	833	84.9	11/08/16 22:49	
4-Nitrophenol	ug/kg	219J	333	42.0	11/08/16 22:49	
Acenaphthene	ug/kg	333 U	333	12.2	11/08/16 22:49	
Acenaphthylene	ug/kg	333 U	333	10.8	11/08/16 22:49	
Acetophenone	ug/kg	333 U	333	15.5	11/08/16 22:49	
Aniline	ug/kg	333 U	333	52.4	11/08/16 22:49	
Anthracene	ug/kg	333 U	333	10.4	11/08/16 22:49	
Atrazine	ug/kg	333 U	333	15.8	11/08/16 22:49	
Azobenzene	ug/kg	333 U	333	11.6	11/08/16 22:49	N2
Benzaldehyde	ug/kg	214J	333	31.1	11/08/16 22:49	
Benzidine	ug/kg	3300 U	3300	3300	11/08/16 22:49	
Benzo(a)anthracene	ug/kg	333 U	333	10.9	11/08/16 22:49	
Benzo(a)pyrene	ug/kg	333 U	333	13.8	11/08/16 22:49	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

METHOD BLANK: 1174917 Matrix: Solid

Associated Lab Samples: 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzo(b)fluoranthene	ug/kg	333 U	333	49.6	11/08/16 22:49	
Benzo(g,h,i)perylene	ug/kg	333 U	333	48.3	11/08/16 22:49	
Benzo(k)fluoranthene	ug/kg	333 U	333	59.2	11/08/16 22:49	
Benzoic acid	ug/kg	833 U	833	458	11/08/16 22:49	6c
Benzyl alcohol	ug/kg	333 U	333	78.2	11/08/16 22:49	
Biphenyl (Diphenyl)	ug/kg	333 U	333	11.6	11/08/16 22:49	
bis(2-Chloroethoxy)methane	ug/kg	333 U	333	15.3	11/08/16 22:49	
bis(2-Chloroethyl) ether	ug/kg	333 U	333	33.9	11/08/16 22:49	
bis(2-Chloroisopropyl) ether	ug/kg	333 U	333	10.4	11/08/16 22:49	
bis(2-Ethylhexyl)phthalate	ug/kg	333 U	333	64.7	11/08/16 22:49	
Butylbenzylphthalate	ug/kg	155J	333	34.8	11/08/16 22:49	
Caprolactam	ug/kg	833 U	833	42.4	11/08/16 22:49	
Carbazole	ug/kg	333 U	333	34.3	11/08/16 22:49	
Chrysene	ug/kg	333 U	333	89.9	11/08/16 22:49	
Di-n-butylphthalate	ug/kg	14.8J	333	12.2	11/08/16 22:49	
Di-n-octylphthalate	ug/kg	333 U	333	39.9	11/08/16 22:49	
Dibenz(a,h)anthracene	ug/kg	333 U	333	49.0	11/08/16 22:49	
Dibenzofuran	ug/kg	333 U	333	56.6	11/08/16 22:49	
Diethylphthalate	ug/kg	333 U	333	12.6	11/08/16 22:49	
Dimethylphthalate	ug/kg	333 U	333	14.0	11/08/16 22:49	
Fluoranthene	ug/kg	333 U	333	82.3	11/08/16 22:49	
Fluorene	ug/kg	333 U	333	15.2	11/08/16 22:49	
Hexachloro-1,3-butadiene	ug/kg	333 U	333	32.8	11/08/16 22:49	
Hexachlorobenzene	ug/kg	333 U	333	37.0	11/08/16 22:49	
Hexachlorocyclopentadiene	ug/kg	333 U	333	164	11/08/16 22:49	
Hexachloroethane	ug/kg	333 U	333	18.3	11/08/16 22:49	
Indeno(1,2,3-cd)pyrene	ug/kg	333 U	333	52.2	11/08/16 22:49	
Isophorone	ug/kg	333 U	333	28.1	11/08/16 22:49	
N-Nitroso-di-n-propylamine	ug/kg	333 U	333	19.6	11/08/16 22:49	
N-Nitrosodimethylamine	ug/kg	333 U	333	38.2	11/08/16 22:49	
N-Nitrosodiphenylamine	ug/kg	333 U	333	49.1	11/08/16 22:49	
Naphthalene	ug/kg	333 U	333	104	11/08/16 22:49	
Nitrobenzene	ug/kg	333 U	333	10.3	11/08/16 22:49	
Pentachlorophenol	ug/kg	833 U	833	104	11/08/16 22:49	6c
Phenanthrene	ug/kg	333 U	333	10.4	11/08/16 22:49	
Phenol	ug/kg	333 U	333	42.4	11/08/16 22:49	
Pyrene	ug/kg	333 U	333	40.6	11/08/16 22:49	
Pyridine	ug/kg	833 U	833	48.8	11/08/16 22:49	
2,4,6-Tribromophenol (S)	%	73	10-140		11/08/16 22:49	
2-Fluorobiphenyl (S)	%	76	38-105		11/08/16 22:49	
2-Fluorophenol (S)	%	82	10-123		11/08/16 22:49	
Nitrobenzene-d5 (S)	%	78	33-104		11/08/16 22:49	
Phenol-d6 (S)	%	79	32-111		11/08/16 22:49	
Terphenyl-d14 (S)	%	82	33-149		11/08/16 22:49	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

LABORATORY CONTROL SAMPLE: 1174918

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/kg	3330	2870	86	37-119	
1,2,4-Trichlorobenzene	ug/kg	3330	2300	69	51-92	
1,2-Dichlorobenzene	ug/kg	3330	2850	85	61-115	
1,3-Dichlorobenzene	ug/kg	3330	2730	82	60-113	
1,4-Dichlorobenzene	ug/kg	3330	2740	82	63-110	
1-Methylnaphthalene	ug/kg	3330	2320	70	50-107	
2,3,4,6-Tetrachlorophenol	ug/kg	3330	2900	87	39-129	
2,4,5-Trichlorophenol	ug/kg	3330	3250	98	43-133	
2,4,6-Trichlorophenol	ug/kg	3330	3120	93	38-140	
2,4-Dichlorophenol	ug/kg	3330	2360	71	34-92	
2,4-Dimethylphenol	ug/kg	3330	2260	68	30-89	
2,4-Dinitrophenol	ug/kg	3330	1400	42	10-145	6c
2,4-Dinitrotoluene	ug/kg	3330	3310	99	55-136	
2,6-Dinitrotoluene	ug/kg	3330	3300	99	51-134	
2-Chloronaphthalene	ug/kg	3330	2960	89	41-129	
2-Chlorophenol	ug/kg	3330	3010	90	31-121	
2-Methylnaphthalene	ug/kg	3330	2210	66	35-87	
2-Methylphenol(o-Cresol)	ug/kg	3330	2860	86	32-121	
2-Nitroaniline	ug/kg	3330	3120	94	51-135	
2-Nitrophenol	ug/kg	3330	2250	67	51-92	
3&4-Methylphenol(m&p Cresol)	ug/kg	3330	2930	88	37-121	
3,3'-Dichlorobenzidine	ug/kg	3330	2920	88	42-127	
3-Nitroaniline	ug/kg	3330	2900	87	46-158	
4,6-Dinitro-2-methylphenol	ug/kg	3330	2600	78	47-149	6c
4-Bromophenylphenyl ether	ug/kg	3330	3060	92	62-139	
4-Chloro-3-methylphenol	ug/kg	3330	2450	74	53-95	
4-Chloroaniline	ug/kg	3330	1690	51	24-82	
4-Chlorophenylphenyl ether	ug/kg	3330	3060	92	69-127	
4-Nitroaniline	ug/kg	3330	3970	119	46-155	
4-Nitrophenol	ug/kg	3330	3010	90	57-142	
Acenaphthene	ug/kg	3330	3000	90	45-127	
Acenaphthylene	ug/kg	3330	3060	92	42-126	
Acetophenone	ug/kg	3330	2680	80	35-102	
Aniline	ug/kg	3330	995	30	10-187	
Anthracene	ug/kg	3330	2890	87	56-118	
Atrazine	ug/kg	3330	2650	79	10-175	
Azobenzene	ug/kg	3330	3040	91	68-133	N2
Benzaldehyde	ug/kg	3330	2380	71	10-175	
Benzidine	ug/kg	3330	3300 U	12	10-175	
Benzo(a)anthracene	ug/kg	3330	3100	93	67-121	
Benzo(a)pyrene	ug/kg	3330	3040	91	66-118	
Benzo(b)fluoranthene	ug/kg	3330	3010	90	58-134	
Benzo(g,h,i)perylene	ug/kg	3330	2570	77	23-164	
Benzo(k)fluoranthene	ug/kg	3330	3240	97	64-133	
Benzoic acid	ug/kg	3330	2320	69	19-107	
Benzyl alcohol	ug/kg	3330	2960	89	47-138	
Biphenyl (Diphenyl)	ug/kg	3330	2820	85	42-113	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

LABORATORY CONTROL SAMPLE: 1174918

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
bis(2-Chloroethoxy)methane	ug/kg	3330	2370	71	36-92	
bis(2-Chloroethyl) ether	ug/kg	3330	2600	78	31-115	
bis(2-Chloroisopropyl) ether	ug/kg	3330	2950	88	31-123	
bis(2-Ethylhexyl)phthalate	ug/kg	3330	3110	93	59-137	
Butylbenzylphthalate	ug/kg	3330	3180	95	65-134	
Caprolactam	ug/kg	3330	2410	72	36-112	
Carbazole	ug/kg	3330	3330	100	57-124	
Chrysene	ug/kg	3330	3020	91	69-121	
Di-n-butylphthalate	ug/kg	3330	3200	96	64-131	
Di-n-octylphthalate	ug/kg	3330	3200	96	51-147	
Dibenz(a,h)anthracene	ug/kg	3330	2620	79	34-159	
Dibenzofuran	ug/kg	3330	2960	89	70-120	
Diethylphthalate	ug/kg	3330	3090	93	62-124	
Dimethylphthalate	ug/kg	3330	3090	93	71-126	
Fluoranthene	ug/kg	3330	3000	90	63-124	
Fluorene	ug/kg	3330	3030	91	49-124	
Hexachloro-1,3-butadiene	ug/kg	3330	2380	71	27-104	
Hexachlorobenzene	ug/kg	3330	3100	93	49-136	
Hexachlorocyclopentadiene	ug/kg	3330	2320	70	10-121	
Hexachloroethane	ug/kg	3330	2860	86	28-121	
Indeno(1,2,3-cd)pyrene	ug/kg	3330	2590	78	34-159	
Isophorone	ug/kg	3330	2490	75	39-91	
N-Nitroso-di-n-propylamine	ug/kg	3330	3080	92	37-122	
N-Nitrosodimethylamine	ug/kg	3330	2550	76	55-124	
N-Nitrosodiphenylamine	ug/kg	3330	2400	72	36-104	
Naphthalene	ug/kg	3330	2280	68	34-89	
Nitrobenzene	ug/kg	3330	2400	72	36-90	
Pentachlorophenol	ug/kg	3330	3310	99	34-139	
Phenanthrene	ug/kg	3330	2980	89	57-120	
Phenol	ug/kg	3330	2910	87	35-119	
Pyrene	ug/kg	3330	2980	89	64-128	
Pyridine	ug/kg	3330	2400	72	47-117	
2,4,6-Tribromophenol (S)	%			96	10-140	
2-Fluorobiphenyl (S)	%			81	38-105	
2-Fluorophenol (S)	%			87	10-123	
Nitrobenzene-d5 (S)	%			66	33-104	
Phenol-d6 (S)	%			85	32-111	
Terphenyl-d14 (S)	%			85	33-149	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 239573 Analysis Method: EPA 8270C
QC Batch Method: EPA 3546 Analysis Description: 8270 Solid MSSV Microwave
Associated Lab Samples: 30200676001

METHOD BLANK: 1177251 Matrix: Solid
Associated Lab Samples: 30200676001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/kg	333 U	333	68.2	11/14/16 17:43	
1,2,4-Trichlorobenzene	ug/kg	333 U	333	43.3	11/14/16 17:43	
1,2-Dichlorobenzene	ug/kg	333 U	333	72.1	11/14/16 17:43	
1,3-Dichlorobenzene	ug/kg	333 U	333	47.6	11/14/16 17:43	
1,4-Dichlorobenzene	ug/kg	333 U	333	10.6	11/14/16 17:43	
1-Methylnaphthalene	ug/kg	333 U	333	17.8	11/14/16 17:43	
2,3,4,6-Tetrachlorophenol	ug/kg	333 U	333	58.3	11/14/16 17:43	
2,4,5-Trichlorophenol	ug/kg	833 U	833	57.9	11/14/16 17:43	
2,4,6-Trichlorophenol	ug/kg	333 U	333	107	11/14/16 17:43	
2,4-Dichlorophenol	ug/kg	333 U	333	11.2	11/14/16 17:43	
2,4-Dimethylphenol	ug/kg	333 U	333	33.6	11/14/16 17:43	
2,4-Dinitrophenol	ug/kg	833 U	833	318	11/14/16 17:43	6c,CH
2,4-Dinitrotoluene	ug/kg	333 U	333	16.1	11/14/16 17:43	
2,6-Dinitrotoluene	ug/kg	333 U	333	40.7	11/14/16 17:43	
2-Chloronaphthalene	ug/kg	333 U	333	12.2	11/14/16 17:43	
2-Chlorophenol	ug/kg	333 U	333	11.8	11/14/16 17:43	
2-Methylnaphthalene	ug/kg	333 U	333	13.7	11/14/16 17:43	
2-Methylphenol(o-Cresol)	ug/kg	333 U	333	37.8	11/14/16 17:43	
2-Nitroaniline	ug/kg	833 U	833	13.3	11/14/16 17:43	
2-Nitrophenol	ug/kg	333 U	333	17.0	11/14/16 17:43	
3&4-Methylphenol(m&p Cresol)	ug/kg	666 U	666	11.0	11/14/16 17:43	
3,3'-Dichlorobenzidine	ug/kg	333 U	333	94.9	11/14/16 17:43	
3-Nitroaniline	ug/kg	833 U	833	83.4	11/14/16 17:43	
4,6-Dinitro-2-methylphenol	ug/kg	833 U	833	64.9	11/14/16 17:43	6c
4-Bromophenylphenyl ether	ug/kg	333 U	333	34.0	11/14/16 17:43	
4-Chloro-3-methylphenol	ug/kg	333 U	333	27.7	11/14/16 17:43	
4-Chloroaniline	ug/kg	333 U	333	52.6	11/14/16 17:43	
4-Chlorophenylphenyl ether	ug/kg	333 U	333	49.0	11/14/16 17:43	
4-Nitroaniline	ug/kg	833 U	833	84.9	11/14/16 17:43	
4-Nitrophenol	ug/kg	333 U	333	42.0	11/14/16 17:43	
Acenaphthene	ug/kg	333 U	333	12.2	11/14/16 17:43	
Acenaphthylene	ug/kg	333 U	333	10.8	11/14/16 17:43	
Acetophenone	ug/kg	333 U	333	15.5	11/14/16 17:43	
Aniline	ug/kg	333 U	333	52.4	11/14/16 17:43	
Anthracene	ug/kg	333 U	333	10.4	11/14/16 17:43	
Atrazine	ug/kg	333 U	333	15.8	11/14/16 17:43	
Azobenzene	ug/kg	333 U	333	11.6	11/14/16 17:43	N2
Benzaldehyde	ug/kg	333 U	333	31.1	11/14/16 17:43	
Benzidine	ug/kg	3300 U	3300	3300	11/15/16 14:08	CH,IS
Benzo(a)anthracene	ug/kg	333 U	333	10.9	11/14/16 17:43	
Benzo(a)pyrene	ug/kg	333 U	333	13.8	11/14/16 17:43	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

METHOD BLANK: 1177251 Matrix: Solid
Associated Lab Samples: 30200676001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzo(b)fluoranthene	ug/kg	333 U	333	49.6	11/14/16 17:43	
Benzo(g,h,i)perylene	ug/kg	333 U	333	48.3	11/14/16 17:43	
Benzo(k)fluoranthene	ug/kg	333 U	333	59.2	11/14/16 17:43	
Benzoic acid	ug/kg	833 U	833	458	11/14/16 17:43	
Benzyl alcohol	ug/kg	333 U	333	78.2	11/14/16 17:43	
Biphenyl (Diphenyl)	ug/kg	333 U	333	11.6	11/14/16 17:43	
bis(2-Chloroethoxy)methane	ug/kg	333 U	333	15.3	11/14/16 17:43	
bis(2-Chloroethyl) ether	ug/kg	333 U	333	33.9	11/14/16 17:43	
bis(2-Chloroisopropyl) ether	ug/kg	333 U	333	10.4	11/14/16 17:43	
bis(2-Ethylhexyl)phthalate	ug/kg	333 U	333	64.7	11/14/16 17:43	
Butylbenzylphthalate	ug/kg	333 U	333	34.8	11/14/16 17:43	
Caprolactam	ug/kg	833 U	833	42.4	11/14/16 17:43	
Carbazole	ug/kg	333 U	333	34.3	11/14/16 17:43	
Chrysene	ug/kg	333 U	333	89.9	11/14/16 17:43	
Di-n-butylphthalate	ug/kg	333 U	333	12.2	11/14/16 17:43	
Di-n-octylphthalate	ug/kg	333 U	333	39.9	11/14/16 17:43	
Dibenz(a,h)anthracene	ug/kg	333 U	333	49.0	11/14/16 17:43	
Dibenzofuran	ug/kg	333 U	333	56.6	11/14/16 17:43	
Diethylphthalate	ug/kg	333 U	333	12.6	11/14/16 17:43	
Dimethylphthalate	ug/kg	333 U	333	14.0	11/14/16 17:43	
Fluoranthene	ug/kg	333 U	333	82.3	11/14/16 17:43	
Fluorene	ug/kg	333 U	333	15.2	11/14/16 17:43	
Hexachloro-1,3-butadiene	ug/kg	333 U	333	32.8	11/14/16 17:43	
Hexachlorobenzene	ug/kg	333 U	333	37.0	11/14/16 17:43	
Hexachlorocyclopentadiene	ug/kg	333 U	333	164	11/14/16 17:43	CH
Hexachloroethane	ug/kg	333 U	333	18.3	11/14/16 17:43	
Indeno(1,2,3-cd)pyrene	ug/kg	333 U	333	52.2	11/14/16 17:43	
Isophorone	ug/kg	333 U	333	28.1	11/14/16 17:43	
N-Nitroso-di-n-propylamine	ug/kg	333 U	333	19.6	11/14/16 17:43	
N-Nitrosodimethylamine	ug/kg	333 U	333	38.2	11/14/16 17:43	
N-Nitrosodiphenylamine	ug/kg	333 U	333	49.1	11/14/16 17:43	
Naphthalene	ug/kg	333 U	333	104	11/14/16 17:43	
Nitrobenzene	ug/kg	333 U	333	10.3	11/14/16 17:43	
Pentachlorophenol	ug/kg	833 U	833	104	11/14/16 17:43	
Phenanthrene	ug/kg	333 U	333	10.4	11/14/16 17:43	
Phenol	ug/kg	333 U	333	42.4	11/14/16 17:43	
Pyrene	ug/kg	333 U	333	40.6	11/14/16 17:43	
Pyridine	ug/kg	833 U	833	48.8	11/14/16 17:43	
2,4,6-Tribromophenol (S)	%	84	10-140		11/14/16 17:43	
2-Fluorobiphenyl (S)	%	96	38-105		11/14/16 17:43	
2-Fluorophenol (S)	%	100	10-123		11/14/16 17:43	
Nitrobenzene-d5 (S)	%	99	33-104		11/14/16 17:43	
Phenol-d6 (S)	%	97	32-111		11/14/16 17:43	
Terphenyl-d14 (S)	%	108	33-149		11/14/16 17:43	

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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

LABORATORY CONTROL SAMPLE: 1177252

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/kg	3330	2870	86	37-119	
1,2,4-Trichlorobenzene	ug/kg	3330	2250	67	51-92	
1,2-Dichlorobenzene	ug/kg	3330	2800	84	61-115	
1,3-Dichlorobenzene	ug/kg	3330	2680	81	60-113	
1,4-Dichlorobenzene	ug/kg	3330	2720	82	63-110	
1-Methylnaphthalene	ug/kg	3330	2240	67	50-107	
2,3,4,6-Tetrachlorophenol	ug/kg	3330	2640	79	39-129	
2,4,5-Trichlorophenol	ug/kg	3330	3090	93	43-133	
2,4,6-Trichlorophenol	ug/kg	3330	3260	98	38-140	
2,4-Dichlorophenol	ug/kg	3330	2300	69	34-92	
2,4-Dimethylphenol	ug/kg	3330	2130	64	30-89	
2,4-Dinitrophenol	ug/kg	3330	1440	43	10-145	6c,CH
2,4-Dinitrotoluene	ug/kg	3330	2990	90	55-136	
2,6-Dinitrotoluene	ug/kg	3330	3060	92	51-134	
2-Chloronaphthalene	ug/kg	3330	2880	86	41-129	
2-Chlorophenol	ug/kg	3330	2900	87	31-121	
2-Methylnaphthalene	ug/kg	3330	2140	64	35-87	
2-Methylphenol(o-Cresol)	ug/kg	3330	3040	91	32-121	
2-Nitroaniline	ug/kg	3330	3080	92	51-135	
2-Nitrophenol	ug/kg	3330	2400	72	51-92	
3&4-Methylphenol(m&p Cresol)	ug/kg	3330	2820	85	37-121	
3,3'-Dichlorobenzidine	ug/kg	3330	2780	83	42-127	
3-Nitroaniline	ug/kg	3330	2920	87	46-158	
4,6-Dinitro-2-methylphenol	ug/kg	3330	3000	90	47-149	6c
4-Bromophenylphenyl ether	ug/kg	3330	3130	94	62-139	
4-Chloro-3-methylphenol	ug/kg	3330	2340	70	53-95	
4-Chloroaniline	ug/kg	3330	1680	50	24-82	
4-Chlorophenylphenyl ether	ug/kg	3330	2930	88	69-127	
4-Nitroaniline	ug/kg	3330	3580	107	46-155	
4-Nitrophenol	ug/kg	3330	2750	83	57-142	
Acenaphthene	ug/kg	3330	2940	88	45-127	
Acenaphthylene	ug/kg	3330	3040	91	42-126	
Acetophenone	ug/kg	3330	2580	77	35-102	
Aniline	ug/kg	3330	1010	30	10-187	
Anthracene	ug/kg	3330	2830	85	56-118	
Atrazine	ug/kg	3330	2560	77	10-175	
Azobenzene	ug/kg	3330	3040	91	68-133	N2
Benzaldehyde	ug/kg	3330	899	27	10-175	
Benzidine	ug/kg	3330	3300 U	25	10-175	CH,IS
Benzo(a)anthracene	ug/kg	3330	3100	93	67-121	
Benzo(a)pyrene	ug/kg	3330	2950	89	66-118	
Benzo(b)fluoranthene	ug/kg	3330	3080	93	58-134	
Benzo(g,h,i)perylene	ug/kg	3330	3260	98	23-164	
Benzo(k)fluoranthene	ug/kg	3330	2950	89	64-133	
Benzoic acid	ug/kg	3330	1180	35	19-107	
Benzyl alcohol	ug/kg	3330	2600	78	47-138	
Biphenyl (Diphenyl)	ug/kg	3330	2860	86	42-113	

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REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

LABORATORY CONTROL SAMPLE: 1177252

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
bis(2-Chloroethoxy)methane	ug/kg	3330	2330	70	36-92	
bis(2-Chloroethyl) ether	ug/kg	3330	2680	80	31-115	
bis(2-Chloroisopropyl) ether	ug/kg	3330	2900	87	31-123	
bis(2-Ethylhexyl)phthalate	ug/kg	3330	3170	95	59-137	
Butylbenzylphthalate	ug/kg	3330	3200	96	65-134	
Caprolactam	ug/kg	3330	2140	64	36-112	
Carbazole	ug/kg	3330	3410	102	57-124	
Chrysene	ug/kg	3330	2980	90	69-121	
Di-n-butylphthalate	ug/kg	3330	2990	90	64-131	
Di-n-octylphthalate	ug/kg	3330	2980	90	51-147	
Dibenz(a,h)anthracene	ug/kg	3330	3130	94	34-159	
Dibenzofuran	ug/kg	3330	2920	88	70-120	
Diethylphthalate	ug/kg	3330	2860	86	62-124	
Dimethylphthalate	ug/kg	3330	2920	88	71-126	
Fluoranthene	ug/kg	3330	2980	89	63-124	
Fluorene	ug/kg	3330	2910	87	49-124	
Hexachloro-1,3-butadiene	ug/kg	3330	2310	69	27-104	
Hexachlorobenzene	ug/kg	3330	3160	95	49-136	
Hexachlorocyclopentadiene	ug/kg	3330	2850	86	10-121	CH
Hexachloroethane	ug/kg	3330	2870	86	28-121	
Indeno(1,2,3-cd)pyrene	ug/kg	3330	3110	93	34-159	
Isophorone	ug/kg	3330	2360	71	39-91	
N-Nitroso-di-n-propylamine	ug/kg	3330	2950	89	37-122	
N-Nitrosodimethylamine	ug/kg	3330	2580	77	55-124	
N-Nitrosodiphenylamine	ug/kg	3330	2480	74	36-104	
Naphthalene	ug/kg	3330	2240	67	34-89	
Nitrobenzene	ug/kg	3330	2390	72	36-90	
Pentachlorophenol	ug/kg	3330	2990	90	34-139	
Phenanthrene	ug/kg	3330	3130	94	57-120	
Phenol	ug/kg	3330	2900	87	35-119	
Pyrene	ug/kg	3330	3230	97	64-128	
Pyridine	ug/kg	3330	2460	74	47-117	
2,4,6-Tribromophenol (S)	%			94	10-140	
2-Fluorobiphenyl (S)	%			85	38-105	
2-Fluorophenol (S)	%			90	10-123	
Nitrobenzene-d5 (S)	%			68	33-104	
Phenol-d6 (S)	%			87	32-111	
Terphenyl-d14 (S)	%			93	33-149	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1177253 1177254

Parameter	Units	30200676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4,5-Tetrachlorobenzene	ug/kg	405 U	4030	4050	3400	3020	84	75	37-119	12		
1,2,4-Trichlorobenzene	ug/kg	405 U	4030	4050	2620	2390	64	59	51-92	9	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1177253 1177254

Parameter	Units	30200676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichlorobenzene	ug/kg	405 U	4030	4050	3160	2720	78	67	61-115	15	25	
1,3-Dichlorobenzene	ug/kg	405 U	4030	4050	2970	2550	73	63	60-113	15	25	
1,4-Dichlorobenzene	ug/kg	40.6J	4030	4050	3060	2560	75	62	63-110	18	25	M1
1-Methylnaphthalene	ug/kg	84.3J	4030	4050	2820	2480	68	59	50-107	13	25	
2,3,4,6-Tetrachlorophenol	ug/kg	405 U	4030	4050	2820	2950	70	73	39-129	5		
2,4,5-Trichlorophenol	ug/kg	1010 U	4030	4050	3720	3250	92	80	43-133	13	25	
2,4,6-Trichlorophenol	ug/kg	405 U	4030	4050	3570	3760	88	93	38-140	5	25	
2,4-Dichlorophenol	ug/kg	405 U	4030	4050	2700	2580	67	64	34-92	5	25	
2,4-Dimethylphenol	ug/kg	405 U	4030	4050	2570	2390	64	59	30-89	7	25	
2,4-Dinitrophenol	ug/kg	1010 U	4030	4050	1010 U	812J	5	20	10-145		25	6c,CH, M1
2,4-Dinitrotoluene	ug/kg	405 U	4030	4050	3350	3340	83	82	55-136	1	25	
2,6-Dinitrotoluene	ug/kg	405 U	4030	4050	3680	3360	91	83	51-134	9	25	
2-Chloronaphthalene	ug/kg	405 U	4030	4050	3450	3150	85	78	41-129	9	25	
2-Chlorophenol	ug/kg	405 U	4030	4050	3350	3020	83	75	31-121	10	25	
2-Methylnaphthalene	ug/kg	122J	4030	4050	2670	2440	63	57	35-87	9	25	
2-Methylphenol(o-Cresol)	ug/kg	405 U	4030	4050	3310	3080	82	76	32-121	7	25	
2-Nitroaniline	ug/kg	1010 U	4030	4050	3460	3360	86	83	51-135	3	25	
2-Nitrophenol	ug/kg	405 U	4030	4050	2520	2430	62	60	51-92	4	25	
3&4-Methylphenol(m&p Cresol)	ug/kg	811 U	4030	4050	3250	3010	80	74	37-121	8	25	
3,3'-Dichlorobenzidine	ug/kg	405 U	4030	4050	2380	2680	58	66	42-127	12	25	IS
3-Nitroaniline	ug/kg	1010 U	4030	4050	2070	2860	51	71	46-158	32	25	R1
4,6-Dinitro-2-methylphenol	ug/kg	1010 U	4030	4050	587J	1450	14	35	47-149		25	6c,IS, M1
4-Bromophenylphenyl ether	ug/kg	405 U	4030	4050	4070	3380	101	84	62-139	18	25	IS
4-Chloro-3-methylphenol	ug/kg	405 U	4030	4050	2830	2680	70	66	53-95	5	25	
4-Chloroaniline	ug/kg	405 U	4030	4050	1000	1530	25	37	24-82	42	25	R1
4-Chlorophenylphenyl ether	ug/kg	405 U	4030	4050	3400	3200	84	79	69-127	6	25	
4-Nitroaniline	ug/kg	1010 U	4030	4050	2000	3010	49	74	46-155	40	25	R1
4-Nitrophenol	ug/kg	405 U	4030	4050	1990	3080	49	76	57-142	43	25	M1,R1
Acenaphthene	ug/kg	192J	4030	4050	3970	3380	94	79	45-127	16	25	
Acenaphthylene	ug/kg	122J	4030	4050	3660	3330	88	79	42-126	9	25	
Acetophenone	ug/kg	405 U	4030	4050	2890	2660	71	66	35-102	8	25	
Aniline	ug/kg	405 U	4030	4050	416	859	10	21	10-187	70	25	R1
Anthracene	ug/kg	396J	4030	4050	4370	3430	99	75	56-118	24	25	IS
Atrazine	ug/kg	405 U	4030	4050	2980	2820	73	69	10-175	5	25	IS
Azobenzene	ug/kg	405 U	4030	4050	4260	3140	105	78	68-133	30	25	IS,N2, R1
Benzaldehyde	ug/kg	405 U	4030	4050	2060	2230	51	55	10-175	8	25	
Benzidine	ug/kg	4020 U	4030	4050	4000 U	4010 U	0	0	10-175		25	CH,IS, M1
Benzo(a)anthracene	ug/kg	2180	4030	4050	7060	5590	121	84	67-121	23	25	IS
Benzo(a)pyrene	ug/kg	2190	4030	4050	6150	5240	98	75	66-118	16	25	IS
Benzo(b)fluoranthene	ug/kg	3700	4030	4050	6760	4650	76	23	58-134	37	25	M6,R1
Benzo(g,h,i)perylene	ug/kg	517	4030	4050	1660	1430	28	22	23-164	15	25	IS,M1
Benzo(k)fluoranthene	ug/kg	1250	4030	4050	7510	6600	155	132	64-133	13	25	IS,M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1177253 1177254

Parameter	Units	30200676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzoic acid	ug/kg	1010 U	4030	4050	1920	1690	48	42	19-107	13	25	
Benzyl alcohol	ug/kg	405 U	4030	4050	3100	2810	76	69	47-138	10	25	
Biphenyl (Diphenyl)	ug/kg	42.4J	4030	4050	3440	3060	84	74	42-113	12	25	
bis(2-Chloroethoxy)methane	ug/kg	405 U	4030	4050	2690	2460	67	61	36-92	9	25	
bis(2-Chloroethyl) ether	ug/kg	405 U	4030	4050	3000	2560	74	63	31-115	16	25	
bis(2-Chloroisopropyl) ether	ug/kg	405 U	4030	4050	3280	2860	81	71	31-123	14	25	
bis(2-Ethylhexyl)phthalate	ug/kg	17100	4030	4050	27600	16700	259	-10	59-137	49	25	M6,R1
Butylbenzylphthalate	ug/kg	198J	4030	4050	5630	5370	135	128	65-134	5	25	IS,M1
Caprolactam	ug/kg	1010 U	4030	4050	2570	2600	64	64	36-112	1	25	
Carbazole	ug/kg	226J	4030	4050	3130	3650	72	85	57-124	16	25	IS
Chrysene	ug/kg	2050	4030	4050	6950	5120	121	76	69-121	30	25	IS,R1
Di-n-butylphthalate	ug/kg	60.8J	4030	4050	3480	3350	85	81	64-131	4	25	IS
Di-n-octylphthalate	ug/kg	82.0J	4030	4050	3870J	2910J	94	70	51-147		25	
Dibenz(a,h)anthracene	ug/kg	142J	4030	4050	1610	1390	36	31	34-159	15	25	IS,M1
Dibenzofuran	ug/kg	123J	4030	4050	3660	3260	88	78	70-120	12	25	
Diethylphthalate	ug/kg	405 U	4030	4050	3470	3290	86	81	62-124	5	25	
Dimethylphthalate	ug/kg	405 U	4030	4050	3580	3210	89	79	71-126	11	25	
Fluoranthene	ug/kg	3030	4030	4050	7310	6130	106	77	63-124	18	25	IS
Fluorene	ug/kg	176J	4030	4050	3730	3340	88	78	49-124	11	25	
Hexachloro-1,3-butadiene	ug/kg	405 U	4030	4050	2720	2440	67	60	27-104	11	25	
Hexachlorobenzene	ug/kg	405 U	4030	4050	3640	3340	90	82	49-136	9	25	IS
Hexachlorocyclopentadiene	ug/kg	405 U	4030	4050	354J	1300	9	32	10-121		25	CH,M1
Hexachloroethane	ug/kg	405 U	4030	4050	2570	2620	64	65	28-121	2	25	
Indeno(1,2,3-cd)pyrene	ug/kg	523	4030	4050	2030	1600	37	27	34-159	23	25	IS,M1
Isophorone	ug/kg	405 U	4030	4050	2770	2560	69	63	39-91	8	25	
N-Nitroso-di-n-propylamine	ug/kg	405 U	4030	4050	3360	3090	83	76	37-122	9	25	
N-Nitrosodimethylamine	ug/kg	405 U	4030	4050	2680	2370	66	59	55-124	12	25	
N-Nitrosodiphenylamine	ug/kg	60.8J	4030	4050	3350	2700	81	65	36-104	21	25	IS
Naphthalene	ug/kg	255J	4030	4050	2770	2560	62	57	34-89	8	25	
Nitrobenzene	ug/kg	405 U	4030	4050	2690	2460	67	61	36-90	9	25	
Pentachlorophenol	ug/kg	1010 U	4030	4050	3130	3390	77	83	34-139	8	25	IS
Phenanthrene	ug/kg	1440	4030	4050	7580	4870	152	85	57-120	44	25	IS,M1, R1
Phenol	ug/kg	405 U	4030	4050	3300	2980	82	74	35-119	10	25	
Pyrene	ug/kg	3570	4030	4050	9140	5120	138	38	64-128	56	25	M6,R1
Pyridine	ug/kg	1010 U	4030	4050	2390	2140	59	53	47-117	11	25	
2,4,6-Tribromophenol (S)	%						102	94	10-140			IS
2-Fluorobiphenyl (S)	%						81	74	38-105			
2-Fluorophenol (S)	%						83	73	10-123			
Nitrobenzene-d5 (S)	%						63	60	33-104			
Phenol-d6 (S)	%						80	75	32-111			
Terphenyl-d14 (S)	%						126	124	33-149			IS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 239605 | Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 30200676002, 30200676003, 30200676004

SAMPLE DUPLICATE: 1177373

Parameter	Units	30200480001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	50.5	51.1	1	20	

SAMPLE DUPLICATE: 1177374

Parameter	Units	30200480004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	51.9	52.1	0	20	

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 239005 | Analysis Method: EPA 7196A
QC Batch Method: EPA 7196A | Analysis Description: 7196 Chromium, Hexavalent
Associated Lab Samples: 30200676001, 30200676002

METHOD BLANK: 1174567 | Matrix: Solid
Associated Lab Samples: 30200676001, 30200676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	0.28J	0.99	0.14	11/04/16 13:00	

LABORATORY CONTROL SAMPLE: 1174568

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	19.8	19.8	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1174572 1174573

Parameter	Units	30200782016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/kg	ND	21.1	21.2	0.29J	0.30J	0	0	75-125		20	M1

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Pace Analytical Services, LLC
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Greensburg, PA 15601
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QUALITY CONTROL DATA

Project: Prologis RCA
Pace Project No.: 30200676

QC Batch: 238307 | Analysis Method: EPA 9045C
QC Batch Method: EPA 9045C | Analysis Description: 9045 pH
Associated Lab Samples: 30200676001, 30200676002

SAMPLE DUPLICATE: 1171188

Parameter	Units	30200676002 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.5	8.5	0	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project:	Prologis RCA
Pace Project No.:	30200676

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI - LI	Pace Analytical Services - Long Island
PASI-LI	Pace Analytical Services - Long Island
PASI-MV	Pace Analytical Services - Long Island
PASI-MVN	Pace Analytical Services - Long Island
PASI-PA	Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: 239088

[1]	A matrix spike/matrix spike duplicate was not performed for this batch due to a laboratory error.

Batch: 239554

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c	A matrix spike/matrix spike duplicate was not performed for this batch due to a laboratory error.
2c	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
3c	The lower of the two results is reported.
4c	The result is reported from the rear analytical column due to a high response for DDE on the front analytical column in the opening and closing calibration standards. The lower of the two results is reported.
5c	The result is reported from the rear analytical column due to high response in the closing CCV on the front analytical column. The lower of the two results is reported.
6c	This analyte was outside the secondary source verification criteria high for the initial calibration. The result is estimated.
B	Analyte was detected in the associated method blank.

QUALIFIERS

Project: Prologis RCA
Pace Project No.: 30200676

ANALYTE QUALIFIERS

C2	Relative percent difference between results from each column was greater than 40%. The lower of the two results was reported.
C3	Relative percent difference between results from each column was greater than 40%. The higher of the two results was reported.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
H2	Extraction or preparation conducted outside EPA method holding time.
IS	The internal standard response is below criteria. Results may be biased high.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
N	Tentatively identified compound (TIC) based on mass spectral library search. Result is estimated.
N2	The lab does not hold NELAC/TNI accreditation for this parameter.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Prologis RCA
Pace Project No.: 30200676

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30200676001	**comp 1**	EPA 3546	239563	EPA 8081A	239666
30200676002	**comp 2**	EPA 3546	239093	EPA 8081A	239666
30200676001	**comp 1**	EPA 3546	242303	EPA 8082	242392
30200676002	**comp 2**	EPA 3546	242303	EPA 8082	242392
30200676001	**comp 1**	EPA 8151A	3451	EPA 8151A	3692
30200676002	**comp 2**	EPA 8151A	3451	EPA 8151A	3692
30200676001	**comp 1**	EPA 3050B	239343	EPA 6010B	239453
30200676002	**comp 2**	EPA 3050B	239343	EPA 6010B	239453
30200676001	**comp 1**	EPA 3005A	239390	EPA 6010B	239445
30200676002	**comp 2**	EPA 3005A	239390	EPA 6010B	239445
30200676001	**comp 1**	EPA 7470A	239242	EPA 7470A	239261
30200676001	**comp 1**	EPA 7470A	239486	EPA 7470A	239505
30200676002	**comp 2**	EPA 7470A	239242	EPA 7470A	239261
30200676002	**comp 2**	EPA 7470A	239486	EPA 7470A	239505
30200676001	**comp 1**	EPA 7471A	239528	EPA 7471A	239565
30200676002	**comp 2**	EPA 7471A	239528	EPA 7471A	239565
30200676001	**comp 1**	EPA 3546	239573	EPA 8270C	240010
30200676002	**comp 2**	EPA 3546	239088	EPA 8270C	239525
30200676003	**voc1**	EPA 5035A	239554	EPA 8260B	239648
30200676004	**voc2**	EPA 5035A	239554	EPA 8260B	239648
30200676002	**comp 2**	ASTM D2974-87	239605		
30200676003	**voc1**	ASTM D2974-87	239605		
30200676004	**voc2**	ASTM D2974-87	239605		
30200676001	**comp 1**	EPA 7196A	239005	EPA 7196A	239061
30200676002	**comp 2**	EPA 7196A	239005	EPA 7196A	239061
30200676001	**comp 1**	EPA 9045C	238307		
30200676002	**comp 2**	EPA 9045C	238307		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed

WO#: 30200676

30200676

Section A Required Client Information:

Company: Sadat Associates
Address: 1545 Lamberton Road Trenton, NJ 08610
Email To: Nick Morgan nmorgan@sadat.com
Phone: 609-826-9600 ext. 130 Fax:
Requested Due Date/TAT: Std

Section B Required Project Information:

Report To: Nick Morgan
Copy To: Khaled Benslimane kbenslimane@sadat.com
Purchase Order No.:
Project Name: Prologis RCA
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

NPDES | GROUND WATER | DRINKING WATER | UST | RCRA | OTHER

Site Location STATE: NJ

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

Preservatives: Unpreserved, H_2SO_4, HNO_3, HCl, NaOH, $Na_2S_2O_3$, Methanol, Other Sodium bisulfate

Analysis Test: Package B requirements; Corrosivity, sulfides; Hexavalent Cr, pesticides; SVOCs, TAL Metals; TCLP RCRA Metals; Package B requirements VOCs

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other (Sodium bisulfate)	Package B requirements	Corrosivity, sulfides	Hexavalent Cr, pesticides	SVOCs, TAL Metals	TCLP RCRA Metals	Package B requirements	VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Comp 1	SL	C	10/25	8:51		8:53		1	X								X	X	X	X	X				001
2	COMP2	SL	C	10/25	8:55		8:57		1	X								X	X	X	X	X				002
3	VOC1	SL	G	Grab	9:14 to 9:20				4	1						1	2						X	X		003
4	VOC2	SL	G	Grab	9:05 to 9:12				4	1						1	2						X	X		004
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Nicholas Morgan	10/25/16	1100	[signature]	10/25/16	1100				
	[signature]	10/25/16	1600	[signature]	10-26-16	1030	3.4	Y	Y	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Nick Morgan
SIGNATURE of SAMPLER: Nicholas Morgan DATE Signed (MM/DD/YY): 10/25/16

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

30200676

Package B Requirements	
	Parameter ID
1,1,1,2-Tetrachloroethane	VOC
1,1,1-Trichloroethane	VOC
1,1,2,2-Tetrachloroethane	VOC
1,1,2-Trichloroethane	VOC
1,1,2 Trichloro-1,2,2 Trifluoroethane	VOC
1-1- Biphenyl	VOC
1,1-Dichloroethane	VOC
1,1-Dichloroethene	VOC
1,2,3-Trichloropropane	VOC
1,2,4-Trimethylbenzene	VOC
1,2-Dibromo-3-Chloropropane	VOC
1,2-Dibromoethane	VOC
1,2-Dichlorobenzene	VOC
1,2-Dichloroethane	VOC
1,2-Dichloropropane	VOC
1,3,5-Trimethylbenzene	VOC
1,3-Dichlorobenzene	VOC
1,3-Dichloropropane	VOC
1,3-Dichloropropene(cis and trans)	VOC
1,4-Dichlorobenzene	VOC
1,4-Dioxane	VOC
2,2-Dichloropropane	VOC
2-Butanone	VOC
2-Chlorotoluene	VOC
4-Methyl-2-Pentanone	VOC
Acetone	VOC
Acrolein	VOC
Acrylonitrile	VOC
Benzene	VOC
Benzidine	VOC
Bromochloromethane	VOC
Bromodichloromethane	VOC
Bromoform	VOC
Bromomethane	VOC
Carbon Disulfide	VOC
Carbon Tetrachloride	VOC
Chlorobenzene	VOC
Chlorodibromomethane	VOC
Chloroethane	VOC
Chloroform	VOC
Chloromethane	VOC
cis-1,2-Dichloroethene	VOC
Dibromomethane	VOC
Dichlorodifluoromethane	VOC
Ethylbenzene	VOC
Isopropylbenzene	VOC
Methyl Acetate	VOC
Methylene Chloride	VOC
Methyl Tert-Butyl Ether	VOC
Naphthalene	VOC
n-Butylbenzene	VOC
n-Propylbenzene	VOC
p-Isoproplytoluene	VOC
sec-Butylbenzene	VOC
Styrene	VOC
tert-Butylbenzene	VOC
Tertiary Butyl Alcohol	VOC
Tetrachloroethene	VOC
Toluene	VOC
Total Xylenes	VOC
trans-1,2-Dichloroethene	VOC
Trichloroethene	VOC
Trichlorofluoromethane	VOC
Vinyl Acetate	VOC
Vinyl Chloride	VOC

Package B Requirements	
	Parameter ID
Hexachlorobutadiene	SVOC
1,2- Diphenylhydrazine	SVOC
1,2,4-Trichlorobenzene	SVOC
2,4,5-Trichlorophenol	SVOC
2,4,6-Trichlorophenol	SVOC
2,4-Dichlorophenol	SVOC
2,4-Dimethylphenol	SVOC
2,4-Dinitrophenol	SVOC
2,4-Dinitrotoluene	SVOC
2,6-Dinitrotoluene	SVOC
2-Chloronaphthalene	SVOC
2-Chlorophenol	SVOC
2-Methylnaphthalene	SVOC
2-Methylphenol	SVOC
2-Nitroaniline	SVOC
2-Nitrophenol	SVOC
3+4 Methylphenol	SVOC
3,3-Dichlorobenzidine	SVOC
m-Cresol(s)	SVOC
3-Nitroaniline	SVOC
4,6-Dinitro-2-methylphenol	SVOC
4-Chloroaniline	SVOC
4-Methylphenol	SVOC
4-Nitroaniline	SVOC
4-Nitrophenol	SVOC
Acenaphthene	SVOC
Acenaphthylene	SVOC
Acetophenone	SVOC
Aniline	SVOC
Anthracene	SVOC
Atrazine	SVOC
Benzaldehyde	SVOC
Benzo-a-Anthracene	SVOC
Benzo-a-Pyrene	SVOC
Benzo-b-Fluoranthene	SVOC
Benzo-k-Fluoranthene	SVOC
Benzo-g,h,i-Perylene	SVOC
Benzoic Acid	SVOC
Benzyl Alcohol	SVOC
Bis(2-Chloroethyl)ether	SVOC
Bis(2-Chloroisopropyl)ether	SVOC
Bis(2-Ethylhexyl)Phthalate	SVOC
Butylbenzylphthalate	SVOC
Caprolactam	SVOC
Carbazole	SVOC
Chrysene	SVOC
Dibenzofuran	SVOC
Dibenzo-a,h-Anthracene	SVOC
Diethyl Phthalate	SVOC
Dimethyl Phthalate	SVOC
Di-n-Butyl Phthalate	SVOC
Dinitrotoluene(2,4-/2,6-)	SVOC
Di-n-Octyl Phthalate	SVOC
Fluoranthene	SVOC
Fluorene	SVOC
Hexachlorobenzene	SVOC
Hexachlorocyclopentadiene	SVOC
Hexachloroethane	SVOC
Indeno(1,2,3-cd)Pyrene	SVOC
Isophorone	SVOC
Nitrobenzene	SVOC
N-Nitrosodimethylamine	SVOC
N-Nitroso-di-n-Propylamine	SVOC
N-Nitrosodiphenylamine	SVOC
Pentachlorophenol	SVOC

3020C676

Package B Requirements	
	Parameter ID
Phenanthrene	SVOC
Phenol	SVOC
Pyrene	SVOC
2,4,5-T	HERBICIDE
2,4,5-TP Acid	PESTICIDE
2,4-D	HERBICIDE
4,4-DDD	HERBICIDE
4,4-DDE	PESTICIDE
4,4-DDT	PESTICIDE
Aldrin	PESTICIDE
alpha-BHC	PESTICIDE
Aroclor 1016	PCB
Aroclor 1221	PCB
Aroclor 1232	PCB
Aroclor 1242	PCB
Aroclor 1248	PCB
Aroclor 1254	PCB
Aroclor 1260	PCB
beta-BHC	PESTICIDE
Chlordane	PESTICIDE
delta-BHC	PESTICIDE
Dieldrin	PESTICIDE
Endosulfan	PESTICIDE
Endosulfan I	PESTICIDE
Endosulfan II	PESTICIDE
Endosulfan Sulfate	PESTICIDE
Endrin	PESTICIDE
gamma-BHC	PESTICIDE
Heptachlor	PESTICIDE
Heptachlor Epoxide	PESTICIDE
Methoxychlor	PESTICIDE
Parathion	PESTICIDE
Polychlorinated Biphenyls	PESTICIDE
Toxaphene	PESTICIDE
Aluminum, Al	METAL
Antimony, Sb	METAL
Arsenic, As	METAL
Barium, Ba	METAL
Beryllium, Be	METAL
Cadmium, Cd	METAL
Calcium, Ca	METAL
Chromium, Cr	METAL
Chromium, hexavalent	METAL
Chromium, trivalent	METAL
Cobalt, Co	METAL
Copper, Cu	METAL
Cyanide	METAL
Iron, Fe	METAL
Lead, Pb	METAL
Magnesium, Mg	METAL
Manganese, Mn	METAL
Mercury, Hg	METAL
Nickel, Ni	METAL
Potassium, K	METAL
Selenium, Se	METAL
Silver, Ag	METAL
Sodium, Na	METAL
Thallium, Ti	METAL
Vanadium, V	METAL
Zinc, Zn	METAL

TCLP Analysis Requirement	
	Parameter ID
Arsenic, As	METAL
Barium, Ba	METAL
Cadmium, Cd	METAL
Chromium, Cr	METAL
Lead, Pb	METAL
Mercury, Hg	METAL
Selenium, Se	METAL
Silver, Ag	METAL
Additional Chemical Analysis Requirements	
	Parameter ID
pH	--

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Sadat Associates   Project # 30200676

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other ______

Tracking #: torn

Custody Seal on Cooler/Box Present: ☒ yes ☐ no   Seals intact: ☒ yes ☐ no

Thermometer Used 6   Type of Ice: Wet Blue None

Cooler Temperature   Observed Temp 3.6 °C   Correction Factor: -0.2 °C   Final Temp: 3.4 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: ML 10-26-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC:	X			5.
-Includes date/time/ID/Analysis Matrix: SL				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used:	X			
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked.			X	13.
All containers needing preservation are found to be in compliance with EPA recommendation.			X	
exceptions: VOA, coliform, TOC, O&G, Phenolics				Initial when completed ML / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:			X	15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr			X	Initial when completed: ML Date: 10-26-16

Client Notification/ Resolution:

Person Contacted: ____________ Date/Time: ____________ Contacted By: ____________

Comments/ Resolution: ____________

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Chain of Custody

WO#:703689

703689

Workorder: 30200676 **Workorder Name:** Prologis RCA **Owner Received Date:** 10/26/2016 **Results Requested By:** 11/9/2016

Report To	Subcontract To
David A. Pichette Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3,4 Greensburg, PA 15601 Phone (724)850-5600	Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040

Requested Analysis: * Herbicides, ~~8150~~ 8151 CNP 11/2/16; * Report 2,4,5-T, 2,4,5-TP and 2,4-D

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	* Herbicides, 8151	* Report 2,4,5-T, 2,4,5-TP and 2,4-D	LAB USE ONLY
1	comp 1	PS	10/25/2016 08:53	30200676001	Solid	1	X		703689
2	comp 2	PS	10/25/2016 08:57	30200676002	Solid	1	X		
3									
4									
5									

Transfers	Released By	Date/Time	Received By	Date/Time
1	RBig Pace	10/31/16 1600	[signature]	11/1/16 0930
2				
3				

Comments

Cooler Temperature on Receipt 2.9 °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO#:703689

PM: CNP Due Date: 11/08/16

CLIENT: PACE-PA

Pace Analytical

Sample Condition Upon Rec

Client Name: PacePA

Courier: Fed Ex UPS USPS Client Commercial Pace Other ________

Tracking #: ________

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Optional
Proj. Due Date:
Proj. Name:

Packing Material: Bubble Wrap Bubble Bags None Other ________

Thermometer Used: TH077 TH078 **Type of Ice:** Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature: 2.9

Date and Initials of person examining contents: 11/1/16 WP

Temp should be above freezing to 6°C

				Comments:
Chain of Custody Present:	☒Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☒Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☐Yes	☒No	☒N/A	4.
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☒No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☒No	☐N/A	7.
Sufficient Volume:	☒Yes	☐No	☐N/A	8.
Correct Containers Used:	☒Yes	☐No	☐N/A	9.
-Pace Containers Used:	☒Yes	☐No	☐N/A	
Containers Intact:	☒Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11.
Sample Labels match COC:	☒Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: SL WT OIL				
All containers needing preservation have been checked.	☐Yes	☐No	☒N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☒N/A	Initial when completed: / Lot # of added preservative:
Exceptions: VOA, micro, TOC, O&G				Date and Time preservative added:
Samples checked for dechlorination:	☐Yes	☐No	☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☒N/A	15.
Trip Blank Present:	☐Yes	☐No	☒N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☒N/A	
Pace Trip Blank Lot # (if purchased): ________				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: ________ Date/Time: ________

Comments/ Resolution: ________

* **PM (Project Manager) review is documented electronically in LIMS.**

F-LI-C-002-rev.00

IMPACT ENVIRONMENTAL
170 Keyland Court| Bohemia| NY | 11716 | 631.269.8800
welcome to solid ground...
www.impactenvironmental.com

MATERIAL CHARACTERIZATION FORM
PHASE III ENVIRONMENTAL, LLC

PROJECT INFORMATION

1) NAME, ADDRESS AND TELEPHONE NUMBER OF FILL SOURCE OWNER/GENERATOR:

Stephie Palm, Senior Property Manager
Prologis, One Meadowlands Plaza, Suite 100, East Rutherford, NJ

2) NAME, ADDRESS AND TELEPHONE NUMBER OF FILL SOURCE OWNER/GENERATOR REPRESENTATIVE:

Same as above

3) FILL SOURCE NAME AND PHYSICAL LOCATION (INCLUDE LOT AND BLOCK, IF AVAILABLE):

255 Route 1&9
Jersey City, NJ

4) DEFINE THE TYPE OF FILL SUBJECT OF THIS APPLICATION. SELECT ONE TYPE ONLY. A SEPARATE FORM IS NEED FOR EACH TYPE OF FILL.

☐ CLEAN FILL

☑ REGULATED FILL

☐ OTHER, DESCRIBE BELOW:

5) VOLUME OF FILL SUBJECT OF THIS APPLICATION: 3 CY

6) DESCRIBE BOTH CURRENT AND HISTORIC LAND USES OF THE SOURCE LOCATION, THE DATE(S) THE FILL WAS GENERATED, REASONS FOR THE GENERATION OF FILL AND/OR THE PROCESS BY WHICH THE FILL WAS GENERATED.

The site is a protion of the former PJP Landfill Property in Jersey City, New Jersey, originally included an area of salt meadows. New Jersey Department of Environmental Protection (NJDEP) has conducted various remedial activities at the Property. In 2008, AMB Pulaski Distribution, LLC, a Prologis entity, purchased the site to construct a warehouse facility. Completed in 2014, the warehouse has two businesses/tenants. The proposed material is generated from fence installation in the capped historic fill area.

7) DESCRIBE ANY REGULATORY (ENVIRONMENTAL) INVOLVEMENT IN THE PROJECT.

This was formally a superfund Site known as PJP Landfill.
https://cumulis.epa.gov/supercpad/cursites/dsp_ssppSiteData2.cfm?id=0200569

8) DESCRIBE THE OPERATIONAL CONTROLS TO BE TAKEN DURING THE HANDLING AND TRANSPORTATION OF THE FILL TO MINIMIZE ENVIRONMENTAL AND HUMAN IMPACTS:

Soil to be loaded onto fully permitted dump trucks, tarped, and delivered directly to the facility. Dust control measures will be implemented as needed. Truck tires will also be washed as needed.

9) DEFINE THE TYPE OF SOLID WASTE – IF MIXTURE, INCLUDE EACH COMPONENTS % OF THE WHOLE:

- ☐ CONCRETE ______ %
- ☐ BRICK / BLOCK ______ %
- ☐ ASPHALT ______ %
- ☐ STONE/ROCK ______ %
- ☐ SAND ______ %
- ☐ SILT ______ %
- ☐ CLAY ______ %
- ☐ MEADOWMAT / VARVE ______ %
- ☐ SLAG / CINDER ______ %
- ☐ LUMBER ______ %
- ☐ WOOD (BRANCHES AND STUMPS) ______ %
- ☐ DEBRIS ______ %
- ☐ PROCESSED DREDGE MATERIAL ______ %
- ☐ UNPROCESSED DREDGE MATERIAL ______ %
- ☒ OTHER 100 %, DESCRIBE BELOW:

Construction site fill

10) IS THE PROPOSED FILL CLASSIFIED AS A HAZARDOUS WASTE BY TOXICITY OR BY DEFINITION?

☐ YES ☑ NO

11) IS THE PROPOSED FILL SUBJECT TO LAND DISPOSAL RESTRICTIONS PHASE IV AT 40 CFR 268?

☐ YES ☑ NO

12) HAS THE FILL BEEN PREVIOUSLY CLASSIFIED AS A RESIDUAL WASTE PURSUANT TO PENNSYLVANIA LAW?

☐ YES ☑ NO

13) INDICATE THE ITEMS CONSIDERED FOR REFERECE WITH THIS APPLICATION:

☒ A SITE MAP OF THE LOCATION OF THE SITE OF ORIGIN.

☒ A SAMPLING PLAN FOR ALL SAMPLES THAT WILL BE OBTAINED FROM THE PROPOSED FILL, INCLUDING A SITE MAP DEPICTING SAMPLE LOCATIONS, SAMPLING FREQUENCY AND COMPOSTING FREQUENCY.

☒ ALL LABORATORY REPORTS PREPARED BY THE COMMERCIAL TESTING LABORATORY, INCLUSIVE OF CHAIN OF CUSTODY DOCUMENTATION.

☒ ANY TABULATED SUMMARY SPREADSHEETS SUMMARIZING THE DATA ON THE LABORATORY REPORTS.

☒ ALL AVAILABLE ENVIRONMENTAL OR GEOTECHNICAL REPORTS WITH RESPECT TO THE SITE AND OR SITES THAT WHERE THE WASTE WAS GENERATED.

14) NAME, ADDRESS AND TELEPHONE NUMBER OF THE LABORATORY:

Pace Analytical Services Inc
1638 Roseytown Road- Suites 2,3 & 4
Greensburg, PA 15601

15) LIST THE SAMPLE NAMES/ID#'S FOR ALL SAMPLES INCLUDED OR REFERENCED WITHIN THE LABORATORY REPORT(S) AND SUBMITTED FOR CONSIDERATION AS PART OF THIS APPLICATION:

Voc 1, VOC 2, Comp1, Comp 2

16) LIST THE SAMPLE NAMES/ID#'S FOR ALL SAMPLES INCLUDED OR REFERENCED WITHIN THE LABORATORY REPORT(S) AND **NOT** SUBMITTED FOR CONSIDERATION AS PART OF THIS APPLICATION:

NA

17) NAME, ADDRESS AND TELEPHONE NUMBER OF THE COMPANY THAT PERFORMED THE SAMPLING:

Sadat Associates, Inc.
1545 Lamberton Rd.
Trenton, NJ 08610

18) IS THE PH OF THE SOIL BELOW 6.0?

☐ YES ☑ NO

CHAIN OF PAYMENT

IN ORDER, STARTING WITH THE OWNER/GENERATOR AND ENDING WITH THE COMPANY TO BE BILLED FOR LOADS OF WASTE RECEIVED, PROVIDE THE CHAIN OF PAYMENT. THIS INFORMATION WILL NOT BE USED TO CIRCUMVENT ANY PARTIES INVOLVED IN THE TRANSACTION.

OWNER/GENERATOR (NAME, COMPANY, TEL# AND EMAIL)

PROLOGIS, LLC
201-635-6008
spalm@prologis.com

IF APPLICABLE, TIER 1 CONTRACTOR/BROKER (NAME, COMPANY, TEL# AND EMAIL)

~~VA Spatz, Inc~~ VA Spatz & Son's Construction, Inc
908-464-0208
paul@vaspatz.com

IF APPLICABLE, TIER 2 CONTRACTOR/BROKER (NAME, COMPANY, TEL# AND EMAIL)

IF APPLICABLE, TIER 3 CONTRACTOR/BROKER (NAME, COMPANY, TEL# AND EMAIL)

BILLING ENTITY TO PHASE III ENVIRONMENTAL (NAME, COMPANY, TEL# AND EMAIL)

CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I AM THE OWNER/GENERATOR OF THE SOLID WASTE REFERENCED WITHIN THIS APPLICATION, AND THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ATTACHMENTS AND THAT, BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THAT THE INFORMATION IS TRUE, ACCURATE AND COMPLETE. FURTHER, I HAVE REVIEWED THE PERMIT PROVIDED BY IMPACT ENVIRONMENTAL CONSULTING, INC. ISSUED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND UNDERSTAND ITS REQUIREMENTS AND OBLIGATIONS. I AM AWARE THAT THERE ARE SIGNIFICANT PENALITIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBLITY OF FINES AND IMPRISONMENT. I UNDERSTAND THAT, IN ADDITION TO CRIMINAL PENALITIES, I MAY BE LIABLE FOR A CIVIL ADMINISTRATIVE PENALTY PURSUANT TO APPLICABLE LAW AND THAT SUBMITTING FALSE, INACCURATE, OR INCOMPLETE INFORMATION MAY BE GROUNDS FOR DENIAL, REVOCATION, OR TERMINATION OF ANY SOLID WASTE FACILITY PERMIT, LICENSE, OR OTHER OPERATING AUTHORITY FOR WHICH I MAY BE SEEKING APPROVAL OR NOW HOLD.

NAME AND ADDRESS OF FILL SOURCE OWNER /GENERATOR (PERSONAL OR CORPORATE):

Prologis, LLP
One Meadowlands Plaza Suite 100
East Rutherford, NJ 07073

PRINTED NAME OF FILL SOURCE OWNER/GENERATOR: Stephie A. Palm

SIGNATURE OF FILL SOURCE OWNER/GENERATOR: [signature]

DATED 4/21/17

Transportation Charter / Manifest

Generator:

GENERATOR: PROLOGIS - STEPHIE PALM
ONE MEADOWLANDS PLAZA - SUITE 100
EAST RUTHERFORD, NJ

SITE: 255 ROUTE 1&9
JERSEY CITY, NJ

Job #10367

1

Authorized By (print) Nicholas Morgan

Authorized By (title) Consultant

Authorized By (sig) Nicholas Morgan

TIME: 7:05 DATE: 8/24/17

Transporter:
Soan Contracting LLC

2

Driven By Soan Contracting

Truck/Trailer Plate AT399V

Driver Signature

TIME: 7:00Am DATE: 8/24/17

Manifest Number 492412

Material/Note(s):

MATERIAL MEETING PA REGULATED FILL

TARE WEIGHT MUST BE INCLUDED

NET WEIGHT ________ GROSS WEIGHT ________

NET TONS ________ TARE WEIGHT ________

TICKET NUMBER ____________________

Project under the management of Impact Environmental. In case of emergency call 631-269-8800 or 631-524-7863

Received By (print)

Receiving Facility:

FORMER NEW JERSEY ZINC-WEST PLANT
1120 MAUCH CHUNK ROAD
PALMERTON, PA 18071

3

Date/Time

By signing this manifest the Hauler accepts that it is solely responsible for the amount of material that is being transported as well as the methods and means for its travel.

Driven By (sig)

APPENDIX E
Certification

New Jersey Department of Environmental Protection
Site Remediation Program

TRADITIONAL OVERSIGHT REPORT CERTIFICATION FORM

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Prologis Ports Jersey City Distribution Center (Portion of PJP Landfill) Site
List All AKAs: Pulaski, Portion of former PJP Landfill, Former Archdiocese Property
Street Address: 400 Sip Avenue, Route 1 and 9 Southside
Municipality: Jersey City (Township Borough or City)
County: Hudson County Zip Code: 07306
Program Interest (PI) Number(s): 576808 Case Tracking Number(s):

SECTION B. REPORT INFORMATION

Report Name: ANNUAL INSPECTION + MAINTENANCE + MONITORING REPORT FOR 2017
Report Date: 03/31/2018

Federal Traditional Case Type :

☐ **RCRA GPRA 2020** ☒ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE**
☐ Other (explain):

SECTION C. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Prologis, L.P.
Representative First Name: Janet Representative Last Name Frentzel
Title: Vice President, Environmental & Engineering
Phone Number: (415) 733-9431 Ext: Fax:
Mailing Address: Pier 1, Bay 1
City/Town: San Francisco State: CA Zip Code: 94111
Email Address: JFrentzel@prologis.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: Janet K. Frentzel Date: 3/28/18
Name/Title: Janet Frentzel/Vice President

SECTION D. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: 576435

First Name: James Last Name: Mack

Phone Number: (908) 448-6566 Ext: Fax:

Mailing Address: 25 Starview Drive

City/Town: Hillsborough State: NJ Zip Code: 08844

Email Address: jamespmack@jpm-llc.com

This statement shall be signed by the LSRP who is submitting this notification in accordance with SRRA Section 16 d. and Section 30 b.2.

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☒ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: James Mack Date: 3/5/18

LSRP Name/Title: James P. Mack

Company Name: JPM-LLC

Completed forms should be sent to:

Assigned Case Manager
Bureau of Case Management
Site Remediation Program
NJ Department of Environmental Protection
401-05F
PO Box 420
Trenton, NJ 08625-0420

VOLUME II OF II

Annual Groundwater Monitoring for 2017
for
Groundwater Classification Exception Area/
Well Restriction Area

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1.0 INTRODUCTION

Volume II of the I+M+M report includes findings from groundwater monitoring conducted in 2017 at the Prologis Ports Jersey City Distribution Center located at Truck Route 1 & 9 South (opposite 400 Sip Avenue), Jersey City, Hudson County, New Jersey. This report is submitted in accordance with the Ground Water Classification Exception Area/Well Restriction Area ("CEA/WRA") program as approved by the New Jersey Department of Environmental Protection ("NJDEP").

Consistent with previous annual submissions and as requested by the NJDEP in its letter dated September 16, 2016,[1] groundwater analytical data of samples taken from the Site was evaluated in the context of specific components of a monitoring network. The components of a monitoring network as listed in the NJDEP letter include those defined by the NJDEP "Ground Water Technical Guidance: Site Investigation, Remedial Investigation, Remedial Action Performance Monitoring."[2] Monitoring network components include source area monitoring wells, plume fringe monitoring wells, and downgradient sentinel wells.

Consistent with the NJDEP Ground Water Technical Guidance and September 16, 2016 letter as well as previous report submissions to the NJDEP, this report does not consider any of the on-site monitoring wells as sentinel wells or compliance points with respect to the fill. Only select surface water monitoring locations constitute sentinel compliance points for the fill. In contrast, the isolated BTEX (benzene, toluene, ethylbenzene, and xylene) source area identified at MW-8SR2 that is limited to a relatively small area of the fill does have monitoring wells that can be considered downgradient sentinel wells or compliance points. Accordingly, as presented in this report under Section 1.3 Water Quality Monitoring Network, this necessitated defining separate and distinct monitoring networks for the fill and the BTEX source area.

As with previous reports, particular attention is focused on select contaminants of concern, namely BTEX compounds and 1,4-dioxane. Both the groundwater and surface water quality sampling results are included in the sections of this report that address the contaminants of concern. While separate surface water and sediment sampling sections are also included in this report, they generally present contaminants that are not of concern due to their prevalence across the Site and their stability over time.

[1] NJDEP letter to Sadat Associates, Inc. for the approval of the 2015 Annual Groundwater Report, September 16, 2016
[2] http://www.nj.gov/dep/srp/guidance/srra/gw_inv_si_ri_ra.pdf

In accordance with the NJDEP letter dated December 27, 2017 approving the *Annual Inspection Monitoring and Maintenance Report for 2016*, this report also includes a summary of the Groundwater Classification Exception Area/Well Restriction Area that was approved on May 24, 2016. In addition, the results of a site wide 2017 synoptic water level study and the 2017 field reconnaissance to evaluate the structural integrity of monitoring wells MW-4S and MW-5SR, which have been reported as not being structurally accessible for sampling in recent sampling events by sampling personnel, are presented.

1.1 DESCRIPTION AND REGULATORY HISTORY

The Site description and regulatory history are presented in Volume I of this report.

1.2 GROUNDWATER CLASSIFICATION EXCEPTION AREA AND WELL RESTRICTION AREA

Because of the presence of contaminants in groundwater above the applicable ground Water Quality Standards (GWQS), Sadat Associates, Inc. (SAI) on behalf of Prologis, L.P. requested the establishment of a Classification Exception Area/Well Restriction Area (CEA/WRA) for the Site. A CEA identifies the contaminants of concern and their expected durations for exceeding their applicable GWQS, and delineates the horizontal and vertical boundaries at which contamination is present. The CEA/WRA, which was approved by the NJDEP, was developed using groundwater data collected from September 2012 to June 2014.

Contaminants of Concern

The contaminants of concern under the CEA include numerous metals and organic compounds, including a pesticide. The inorganic contaminants of concern are commonly associated with historical fill. At least some of the organic contaminants of concern are associated with landfill related activities, such as the gasoline related compounds and likely the 1,4-dioxane. In accordance with NJDEP regulations, an indeterminate CEA was established for the historical fill contaminants. Similarly, an indeterminate CEA was also established for any potential site related organic contaminant of concern, as it is difficult at this time with the existing inter-temporal concentration fluctuations to project durations. However, continued water quality sampling will provide additional time series data that may support future efforts to estimate durations for organic contaminants of concern.

CEA Boundaries

The northern and southwestern boundaries of the Site constitute two horizontal boundaries of the established CEA. The southeastern portion of the former PJP Landfill, which intersects with the Sip Avenue Ditch and the Hackensack River, constitute the other horizontal limits of the CEA. This is consistent with both delineated groundwater flow and the surface water monitoring network established in the Record of Decision (ROD), which includes sentinel wells.

The depth of the CEA extends to the top of the glaciolacustrine, silt and clay unit, which is located at a depth range of 25 to 60 feet below ground surface. Groundwater in the unconsolidated materials above the Passaic Formation at the Site has been divided into two water bearing units: the shallow water bearing zone (in the manmade fill above the meadow mat) and the deep water bearing zone (below the meadow mat) as defined in the Phase I Remedial Investigation Report.

Current Groundwater Use

Groundwater in the vicinity of the Site is not used as a potable water supply. The Site is serviced by the Jersey City municipal water supply. The City of Jersey City receives its drinking water from the Boonton Reservoir.

1.3 WATER QUALITY MONITORING NETWORK

As required by the CEA/WRA program, Prologis performed the quarterly groundwater monitoring in 2017. The CEA/WRA program requires analysis for specified compounds in groundwater samples collected from shallow on-site monitoring wells. In addition, in conjunction with the Amended Design Report (dated December 2007, revised May 2008) approval, the deep monitoring wells were to be included in the groundwater sampling program for a period of two years following completion of the installation of the Controlled Modulus Columns (CMCs). Therefore, this report also includes the results of the sampling of the deep monitoring wells. Section 2.1 of this report provides further information on the groundwater monitoring network, and Section 2.2 provides further information on the surface water and sediment quality sampling.

As required by the NJDEP's September 16, 2016 letter, the analytical data was evaluated by segregating monitoring wells and surface water monitoring stations (e.g., sentinel wells) for the fill and the limited BTEX source area into their respective monitoring components. Because of these two distinct sources, there are two distinct monitoring networks utilizing the same set of monitoring wells and surface water sampling locations. Table 1 displays the monitoring locations split by source type.

Table 1. Monitoring Location Types by Fill and BTEX Source Areas

Monitoring Location Component	Fill	BTEX
Background	SW-4, SW-5	MW-1SR, MW-9SR
Source Area	MW-1SR, MW-4S*, MW-5SR*, MW-8SR2, MW-9SR	MW-8SR2
Contaminant Plume Wells	Not Applicable	None
Contaminant Plume Fringe Wells	Not Applicable	None
Downgradient Sentinel Wells	SW-1, SW-2, SW-3	SW-1, SW-2, SW-3, MW-4S*, MW-5SR*
Lateral Sentinel Wells	Not Applicable	None
Vertical Sentinel Wells	MW-1DR, MW-4D, MW-8DR3	MW-4D, MW-8DR3

*Monitoring wells could not be sampled in 2017 as discussed further in Appendix H and Section 2.1.1.

1.3.1 Fill Monitoring Network

Waste is present throughout the entire former PJP Landfill (therefore, throughout the entire Site) and thus extends to the shorelines of the Hackensack River and the Sip Avenue Ditch. All shallow monitoring wells serve as source area wells because they are installed within the fill, or for MW-1SR and MW-9SR are or have been impacted by the fill due to groundwater mounding. Deep monitoring wells MW-1DR, MW-4D, and MW-8DR3 serve as vertical sentinel wells for the fill.

Because the on-site shallow monitoring wells are all installed within the fill, the ROD required that the integrated surface water monitoring stations be integrated into the monitoring network to establish background and sentinel monitoring locations for the fill. The two monitored surface water features are the adjacent Hackensack River and the hydraulically connected Sip Avenue Ditch, which essentially bisects the Jersey City owned parcel of the property. The Prologis parcel is adjacent to the Jersey City parcel south of the SIP Avenue Ditch.

The ROD designated surface water monitoring stations SW-2 and SW-3 as the downgradient sentinel wells. SW-2 is located at the confluence of the Sip Avenue Ditch and the Hackensack River. SW-3 is situated midway of the on-site section of the Sip Avenue Ditch, approximately 1,000 feet upstream of SW-2. Because shallow groundwater flow converges to and discharges into the Sip Avenue Ditch along both its shorelines, SW-2 and SW-3 are impacted by groundwater originating from both the Prologis and Jersey City parcels. In addition, the southern portion of the Jersey City parcel is between the Sip Avenue Ditch and the Prologis parcel. Furthermore, tidally induced reversals in surface water flows in the Sip Avenue Ditch and the Hackensack River limit the effectiveness of these surface water monitoring stations in differentiating not only between potential impacts from the Jersey City and Prologis parcels, but also from what may originate from other sources impacting the Hackensack River. Accordingly, an overall evaluation of the combination of the groundwater monitoring wells and surface water stations is necessary to assess any potential impacts from the Prologis and Jersey City parcels.

The ROD designated surface water monitoring locations SW-4 and SW-5 as background monitoring locations. SW-4 is located at the most upstream on-site portion of the Sip Avenue Ditch. SW-5 is located approximately 1,000 feet from SW-2 on the Hackensack River shoreline upstream of the Site. However, because the Hackensack River is tidal, upstream refers to the mean (i.e., average) daily flow condition as reversals in river flow associated with diurnal tides occur each day. Consequently, there are times of the day when these stations can be impacted by downstream sites due to these tidal flow reversals.

The last remaining surface water station, SW-1, is situated on the Hackensack River approximately 1,000 feet downstream of SW-2, and relatively close to the Prologis parcel. This surface water station is included as a downgradient sentinel monitoring well. Monitoring wells MW-1DR, MW-4D and MW-8DR3, which are screened in the lower semi-confined unit, serve as vertical sentinel wells for the fill.

1.3.2 BTEX Source Monitoring Network

The high concentrations of BTEX in shallow groundwater first measured in July 2013 following the installation of MW-8SR2 appear to represent an old isolated gasoline source. Because the high concentrations are limited to MW-8SR2, this well serves as the only source well. As this monitoring well is located on the western side of the parcel closer to the Hackensack River, shallow groundwater at this location generally flows towards the river and the Sip Avenue Ditch. Therefore, monitoring wells MW-1SR and MW-9SR, located on the eastern side of the parcel near Truck Route 1 & 9 South, all serve as background monitoring wells for the BTEX source.

Similar to the fill, surface water monitoring stations SW-1, SW-2, and SW-3 serve as downgradient sentinel wells for the BTEX source. Because of their locations and depths, MW-4S and MW-5SR can also serve as downgradient sentinel monitoring wells. However, as presented in Section 2.1.1 and in

Appendix H of this report, both MW-4S and MW-5SR could not be sampled in 2017 due to well accessibility.

Semi-confined monitoring wells MW-4D and MW-8DR3 serve as vertical sentinel wells for the BTEX source area. MW-8DR3 is adjacent to the BTEX source area monitoring well MW-8SR2 while MW-4D is adjacent to MW-4S, which is hydraulically downgradient of MW-8SR2. The third deep on-site monitoring well, MW-1DR, is not part of the monitoring program for this source area as it is installed in the formation below the BTEX source and hydraulically upgradient of groundwater flow relative to this source.

1.3.3 Hydrogeology

Aquifers in the area of the Site consist of the Pleistocene age unconsolidated glaciolacustrine sediments overlying the deeper bedrock Passaic Formation. The glaciolacustrine sediments beneath the Site include coarser materials like sand and gravel interlayered with less permeable silts and clays. The underlying Passaic Formation consists of shale and sandstone and can serve as a principle source of groundwater. However, groundwater in the vicinity of the Site is not used for potable water supply; Jersey City receives its drinking water from the Boonton Reservoir. Groundwater occurs within the Passaic Formation under both unconfined and confined conditions. However, in the Piedmont Lowlands of the Hackensack Meadowlands, the bedrock aquifer is under semi-confined and confined conditions due to the low permeability glaciolacustrine units which overlie it.

As shown on Figure 2 of Appendix A, the Hackensack River borders the western side of the Site. The Sip Avenue Ditch transects east-west just north of the Site, where it connects into the Hackensack River. Figure 2 of Appendix A depicts the Site location and the existing groundwater monitoring system. As shown by boring logs, the Site and its fill overlie a multilayered groundwater system consisting of a number of distinct hydrogeologic units, including higher permeability sand and gravel sediments, lower permeability silt and clay sediments, and the regional Passaic Formation bedrock.

The uppermost fill material, ranging in thickness from 12 to 32 feet, resides on top of a low permeability organic peat layer that has an average thickness of four to six feet. Below the peat layer is a thin semi-confined sand unit approximately five to 12 feet thick, which pinches out in some places to the west. Underlying the semi-confined sand unit is a glaciolacustrine unit consisting primarily of varied silt and clay, ranging in thickness from about 10 to 30 feet. Below this low permeability semi-confining unit is a glacial till layer consisting of both finer (i.e., silt and clay) and coarser (i.e., sand, gravel, cobbles, and boulders) sediments, which resides on top of the shale and sandstone Passaic Formation.

Historically, the preconstruction depth to groundwater at the Site ranged from approximately 2.5 to 25 feet below the pre-constructed grade, with shallower depths generally occurring on the eastern side where fill material is thinnest. In 2012, a synoptic water level study was conducted to delineate groundwater flow across the entire former PJP Landfill site in both the shallow unconfined fill unit and the deeper semi-confined sand unit. Numerous monitoring wells were instrumented along with three surface water stations located along the Sip Avenue Ditch and one surface water station located on the Hackensack River. Water levels were collected at one-minute intervals over a consecutive seven day period, spanning September 12, 2012 to September 18, 2012. The results of the study are presented in detail in the SAI report entitled, *Supplemental Groundwater Investigation Preliminary Report*, dated June 28, 2013.

Briefly, the June 2013 *Supplemental Groundwater Investigation Preliminary Report* presented the following major findings related to the hydrogeology at the Site.

- Groundwater flow within the shallow fill aquifer is generally toward the Hackensack River and the Sip Avenue Ditch. However, because of localized mound effects near monitoring well MW-8SR2, a radial outward flow extends from this mound toward the upgradient monitoring wells at the Site. This radial outward flow occurs during daily low, daily average, and daily high tidal conditions as depicted by the potentiometric surfaces presented in Figures 6, 3 and 5 of Appendix A, respectively. This pattern has remained consistent over time.
- The daily mean (i.e., daily average) groundwater flow within the deep semi-confined aquifer is generally towards the Hackensack River. However, due to other significant tidal effects of the river, there are short-term diurnal reversals in the hydraulic gradient corresponding to the two daily high tide events. Figures 8, 4 and 7 of Appendix A depict the potentiometric surfaces of this aquifer during daily low, daily average, and daily high tidal conditions, respectively.

These hydrogeological findings are consistent with historical data reported in the April 1990 Remedial Investigation (RI), which is part of the 1995 USEPA Record of Decision that established the selected remedy for the former PJP Landfill.

In a letter dated October 18, 2016[3] to the City of Jersey City, the NJDEP requested that a synoptic water level sampling event be conducted across the entire former PJP Landfill site to assist in better understanding the direction of groundwater flow. The scope and results of this study, presented in the next section, are in agreement with the groundwater flow directions delineated by the 2012 synoptic study.

1.4 2017 SYNOPTIC GROUNDWATER LEVEL STUDY

As requested by the NJDEP in its letter of October 18, 2016, the consultants for the City of Jersey City (Boswell and Arcadis) coordinated with SAI the collection of synoptic measurements of groundwater elevations to confirm existing groundwater flow conditions at the former PJP Landfill site. Unlike the synoptic water level study performed by SAI in 2012 on behalf of Prologis, during which water levels were automatically measured at high frequency in both groundwater monitoring wells and surface water stations across the entire site, including the Hackensack River and the Sip Avenue Ditch, only manual groundwater measurements were collected in 2017. Manual groundwater measurements were coordinated to correspond to high and low tide events on both measurement days (October 16, 2017 and December 15, 2017), with the data shared between the parties for independent analysis.

Table B1A in Appendix B summarizes the collected data for high and low tide for both measurement events for each of the former PJP Landfill parcels. The table includes data provided by each consultant along with well IDs, well permit numbers, well coordinates, both ground surface and surveyed top of inner casing elevations, corresponding screened intervals for the monitoring wells from the ground surface, date and time of water level measurement, and depth to water measurements and corresponding groundwater elevations.

Surface water elevation measurements were not collected during the 2017 synoptic groundwater study. Because the Sip Avenue Ditch is a groundwater discharge boundary for both adjacent parcels, and the Hackensack River serves as a dynamic variable head boundary condition for the former PJP Landfill site as a whole, accurate delineation of the potentiometric surface and groundwater flow would not be possible without inclusion of these two surface water features. Because tidally varying surface water elevations are relatively consistent over time, their influence on groundwater flow is also consistent over time. Therefore, surface water elevations measured during the continuous synoptic water level study conducted in 2012 by SAI should be relatively similar to conditions in 2017. To account for the two

[3] NJDEP letter to the City of Jersey City for the approval of the 2015 Annual Groundwater Report, October 18, 2016

surface water boundaries in delineating groundwater flow with the 2017 data, the surface water elevations measured in 2012 were used as surrogate approximations to surface water elevations.

The groundwater elevations measured in the monitoring wells during the 2012 synoptic water level study were compared to the measurements from the 2017 study for low and high tide events. The comparison revealed that the groundwater elevations between these two studies were very similar, with minimal differences in measured values for the low, mean, and high tide events. This supported that the use of the surface water elevations as surrogate values for 2017 would be a reasonable approach, as groundwater elevations and flow at the entire site are influenced by surface water elevations in both the Sip Avenue Ditch and the Hackensack River. In addition, because of inconsistencies in the reported well elevations in 2017 for MW-11S and the corresponding groundwater elevations for this well, the 2012 measured values obtained from the synoptic study for MW-11S as well as MW-14S were used for the 2017 analysis.

Groundwater contour maps were developed for the shallow unconfined aquifer for representative low and high tide events using synoptic measurement data from the October 16, 2017 event. This event was selected because it was the only event where groundwater elevations could be measured in MW-4S for both low and high tide events. In addition, the average groundwater elevations for the two events were computed to approximate the mean (i.e., average) daily potentiometric surface and corresponding groundwater flow at the Site, for which an additional contour map was developed.

Table 2 summarizes the data used to create the contour maps using Surfer software. The wells were selected based on several factors including geologic formation, site location, and available data.

Table 2. Wells and Groundwater Measurements used for 2017 Contour Maps

Well ID		NJ State Plane Coordinates*		Surveyed Elevations		Screen Interval	
	Permit No.	Northing (Y)	Easting (X)	Ground (ft. MSL)	Inner Casing (ft. MSL)	(ft.)	Collector
MW-6	E201506494	692802	608167	8.33	7.93	5.0 - 10.0	Arcadis
MW-7	E201710557	693059	608380	11.3	10.88	5.0 - 15.0	Arcadis
MW-11S	NA	693879.6	607009.8	NA	12.65	NA	Boswell
MW-10S	NA	694049	606524	NA	23.69	NA	Boswell
MW-7S	NA	693429	606830.5	NA	18.11	NA	Boswell
MW-9SR	E201209313	692428.1	607804.6	11.5	11.57	2.7 - 12.7	Sadat Associates, Inc.
MW-8SR2	E201307823	693134.0	606250.5	18	19.44	10.0 - 20.0	Sadat Associates, Inc.
MW-4S	26-15307-6	693414.6	605815.0	35.5	38.06	29.4 - 39.3	Sadat Associates, Inc.
MW-1SR	E201209018	692049.7	607461.4	17.75	20.00	7.5 - 17.5	Sadat Associates, Inc.

Contour maps with the same degree of accuracy could not be developed for the deeper semi-confined aquifer, as the only three deep monitoring wells (MW-1D, MW-4D, and MW-8DR3) are aligned with each other in a straight line. Because of this sparsity of deep monitoring wells and their linear alignment, reasonably representative contour lines of the potentiometric surface in the deeper semi-confined unit could not be interpolated through Surfer compared to the 2012 synoptic water level study results where more deep and spaced wells were available. However, the groundwater flow pattern in the deeper semi-confined aquifer, which is overlain by the low permeability layer (peat and clay), would remain largely controlled by natural hydrologic conditions (i.e., Hackensack River acts as a discharge boundary).

In contrast, given the high number of monitoring wells, their spatial distribution and inclusion of the two surface water boundaries, the three contour maps representing low, mean, and high tide events for the shallow unconfined unit generated realistic approximations of its potentiometric surface for the different tidal conditions. Figures 9, 10, and 11, representing the contour maps for the low, mean, and high tide events, respectively, are provided in Appendix A.

As shown, the contour maps demonstrate that in the shallow unconfined unit, there is a radial component of flow on the Prologis parcel centered around MW-8SR2, where the higher elevation of the groundwater mound is located. Similarly, there is radial flow on the Jersey City parcel centered at MW-11S. In general, groundwater flow converges towards the Sip Avenue Ditch from both parcels, with some component of groundwater flow towards the Hackensack River. During the high tide events, there is some short term reversal in groundwater flow immediately adjacent to the surface water bodies. As shown, during the daily mean tidal condition, the overall direction of groundwater flow is towards the two surface water bodies.

These delineated groundwater flow directions for the low, mean, and high tidal conditions for the shallow unconfined unit are consistent with those delineated using the more comprehensive 2012 synoptic water level study results. Therefore, the groundwater mound has not changed appreciably since completion of site development activities. Similarly, the measured groundwater elevations for the deeper semi-confined unit are relatively similar to those measured in 2012, indicating that the potentiometric surface in this unit has remained fairly constant over time. Although contour maps could not be developed for the deeper semi-confined unit, groundwater flow is still directed towards the Hackensack River based upon the measured groundwater elevations for this unit. This is to be expected as the Hackensack River represents a major groundwater discharge boundary.

2.0 ENVIRONMENTAL SAMPLING

Groundwater quality data for the four quarterly monitoring events of 2017 were collected on the Prologis portion of the former PJP Landfill. The quarterly groundwater sampling was coordinated with groundwater and surface water quality sampling performed by the City of Jersey City. The City of Jersey City shared its data with Prologis, which allowed SAI to perform a comprehensive site wide groundwater quality assessment and evaluate any potential effects on surface water quality.

In a letter dated July 13, 2011, the NJDEP requested that time series/trend graphs be developed for each parameter of concern. These graphs (Appendix C) are intended to illustrate changes in concentrations over time, including comparisons to historic pre-remediation data. Accordingly, the graphs have been prepared for parameters that exceeded the GWQS in individual monitoring wells. Electronic versions of the laboratory reports and electronic data deliverables for each sampling event are provided in Appendix F.

With concurrence by the NJDEP, if contaminants of concern are detected above the applicable standards in the surrogate sentinel points (surface water and sediment locations) and concentrations of these contaminants exhibit statistically significant increases relative to historically measured concentrations in two consecutive sampling episodes, the City of Jersey City would notify the NJDEP, USEPA and Prologis. In response to such notice, Prologis would participate in dialog/meetings with the City of Jersey City, with the participation and guidance of the NJDEP as necessary, to determine which Signatory Party/Parties would take the appropriate measures to mitigate any findings based on a comprehensive review of the data/evidence. It is expressly understood and acknowledged that the NJDEP's participation in this process amongst the Signatory Parties is solely on an as needed basis, and is as a facilitator of the dialogue in order to ensure that all of the NJDEP concerns are being adequately addressed. Such participation by the NJDEP shall not be deemed a waiver of any rights and/or acceptance or assumption of any notice. The NJDEP will contact Waste Management, Inc. should matters being addressed pertain to their responsibilities.

2.1 GROUNDWATER MONITORING

2.1.1 Groundwater Monitoring Network

Because the historic waste material in the former PJP Landfill is the source of the existing on-site groundwater contamination, the source area monitoring network includes the eight existing on-site wells (MW-1SR, MW-1DR, MW-4D, MW-4S, MW-5SR, MW-8DR3, MW-8SR2, and MW-9SR). Well records for all wells were previously submitted to the NJDEP.

During the installation of the engineering controls for the final remediation of the Site and construction of the Distribution Center, some of the wells had been extended to facilitate the new ground elevations at the Site. The final elevation of the Site was confirmed at the end of 2014 following completion of the construction of the Distribution Center. The eight wells were subsequently resurveyed to indicate their new elevations. A copy of these Monitoring Well Certifications (Form B documents), dated January 9, 2015, is included in Appendix E.

Prologis continues to sample both shallow and deep monitoring wells on a quarterly basis. Sampling is coordinated with the sampling performed by the City of Jersey City on its portion of the former PJP Landfill to enhance temporal and spatial comparisons in groundwater quality between the two parcels. In addition, the City of Jersey City is responsible for collecting all surface water and sediment samples at the former PJP Landfill site. These samples are collected from two stations on the Hackensack River and three stations along the Sip Avenue Ditch.

Evaluation of Dry Monitoring Wells MW-4S and MW-5SR

As in previous years, both shallow and deep monitoring wells were sampled during the four quarters of 2017. Table 3 summarizes the data from the eight existing wells and their sampling accessibility in 2016 and 2017. Dry does not necessarily mean that there was no water in the monitoring well. Rather, as explained further below, the sampling pump could not be lowered into the water column due to well accessibility. In some instances, the water level instrument similarly could not be lowered into the water column in the monitoring well to measure the depth to water.

Table 3. Well Sampling Dates by Quarter for 2016 and 2017

Sample Dates	**Well Type**	**1Q16**	**2Q16**	**3Q16**	**4Q16**	**1Q17**	**2Q17**	**3Q17**	**4Q17**
		March 14	*June 6*	*Sept 22 & 23*	*Dec 15*	*March 24 & 27*	*June 22*	*Sept 26*	*Dec 20*
MW-1SR	Shallow	X	X	X	X	X	X	X	X
MW-4S	Shallow	X	X	DRY	DRY	DRY	DRY	DRY	DRY
MW-5SR	Shallow	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-8SR2	Shallow	X	X	X	X	X	X	X	X
MW-9SR	Shallow	X	X	X	X	X	X	X	X
MW-1DR	Deep	X	X	X	X	X	X	X	X
MW-4D	Deep	X	X	X	X	X	X	X	X
MW-8DR3	Deep	X	X	X	X	X	X	X	X

Note: DRY denotes not accessible

In 2016, sampling personnel for the laboratory reported that monitoring well MW-5SR was dry for all four quarters, and MW-4S was dry during the third and fourth quarters. This problem persisted into 2017, when sampling personnel reported that both monitoring wells could not be sampled during all four quarters of 2017.

In the Annual Monitoring and Maintenance Report for 2016, SAI attempted to determine whether these two monitoring wells could not be sampled due to a decreasing groundwater mound across the Site by comparing historical data over time. Table 4 below summarizes these measured groundwater elevations for shallow monitoring wells for 2014 through 2016.

Table 4. Measured Depths to Groundwater (Feet) in Shallow Monitoring Wells on Prologis Parcel from 2014 through 2016

MW	1Q2014	2Q2014	3Q2014	4Q2014	1Q2015	2Q2015	3Q2015	4Q215	1Q2016	2Q2016	3Q2016	4Q2016
1SR	15.23	14.83	17.74	17.32	17.32	17.24	17.63	17.6	17.27	-	17.45	17.31
4S	35.7	35.78	34.05	34.44	32.34	32.94	33.71	33.23	32.34	-	32.5	-
5SR	27.87	28.21	28.64	28.09	27.66	25.94	-	-	-	-	28.38	-
8SR2	12.4	12.2	14	12.33	12.1	12.24	13.55	13.02	12.22	-	13.07	12.27
9SR	8.96	8.82	9.23	9.08	9.01	9.02	9.29	9.4	9.00	-	8.5	9.25

As shown, despite the presence of a low permeability surface on the Prologis parcel following site development, there is no obvious decrease in groundwater elevations over time in the shallow fill monitoring wells. As discussed previously in this report, the lack of an appreciable decline of the groundwater mound at the Site following development activities was confirmed by the synoptic water level study of 2017.

Sampling personnel continued to report in 2017 that sampling pumps could not be lowered into the water column in monitoring wells MW-4S and MW-5SR. To verify and investigate the source of this problem, SAI performed a field reconnaissance in August 2017 to ascertain the condition and structural integrity of these two monitoring wells. The SAI investigation indicated that the inner casing of well MW-4S is blocked and the inner casing of well MW-5SR is bent. The findings of the SAI field reconnaissance of the two wells are presented in Appendix H. In 2018, monitoring wells MW-4S and MW-5SR will be evaluated by a licensed well driller, and will either be repaired or replaced. If any of the wells is replaced, the replacement well will be installed as close as possible to the existing well, which will be properly sealed and abandoned by a licensed well driller.

2.1.2 Data Quality Assurance and Quality Control

Upon receipt, the laboratory data deliverables were reviewed according to SAI's internal Standard Operating Procedures and the USEPA method specific quality assurance requirements. Analyses for each sampling event met the designated holding times, and the laboratory quality control samples showed that the analyses met the quality control limits established by the laboratory and the USEPA approved methodology.

Field quality control samples, field blanks and trip blanks were collected on each day of sampling. Summaries of the field blank and trip blank analyses for each sampling event are tabulated in Table B3 of Appendix B. In addition, copies of the reduced Laboratory Reports and Electronic Data Deliverables for each quarter are included in Appendix F.

2.1.3 Data Usability

All environmental sampling, except as noted in this report, was performed in accordance with the NJDEP's Technical Requirements for Site Remediation, and the protocols outlined in the NJDEP Field Sampling Procedures Manual (August 2005). In addition, a Health and Safety Plan was prepared and followed in accordance with the OSHA requirements for health and safety contained in 29 CFR 1910.120 and 29 CFR 1926 Subpart C.

Upon receipt, the laboratory data deliverables were reviewed using SAI's internal standard operating procedure and USEPA method specific quality assurance requirements. All analyses performed met the designated holding times, and the laboratory quality control samples showed that the analyses met the quality control parameters established by the laboratory and the USEPA approved methodology. All laboratory data was provided in reduced deliverables and electronic formats as required by the NJDEP. The data quality met the objectives of the monitoring without inhibiting impacts to the objectives.

2.1.4 Sampling Protocol

Under the supervision of SAI, SGS Accutest collected groundwater samples via the Low-Flow Purging and Sampling method. Sampling was performed in accordance with the protocols outlined in the NJDEP's Field Sampling Procedures Manual (August 2005). Parameters of concern associated with landfill operations include Target Compound List ("TCL") organic and Target Analyte List ("TAL") inorganic compounds. Metals analysis was conducted on unfiltered samples only. Table 5 includes a list of the specific parameters analyzed for both the groundwater and surface water matrices, including analytical and sampling methods used.

Table 5. Analytical Methods, Container Sizes/Materials, Preservatives, and Holding Times

PARAMETER	ANALYSIS METHOD	CONTAINER SIZE/ MATERIAL	PRESER-VATIVE	HOLDING TIME (DAYS)
Total Dissolved Solids (TDS)	SM2540C-97	500 ml/Plastic	4^0C	7
Total Suspended Solids (TSS)	SM2540D-97	500 ml/Plastic	4^0C	7
Volatile Organic Compounds (VOCs)	EPA 624	4x40 ml/Glass	HCl	14
Semi-Volatile Organic Compounds (SVOCs)	EPA 625 EPA 8260B EPA 8270C SIM	1L/Amber Glass	4^0C	7 (extraction) 40 (analysis)
TAL Metals	EPA 200.7/8 NJGWQS 200.8	500ml/Plastic	HNO_3	180
2,3,7,8-TCDD	EPA 1613	IL/Amber G	4^0C	365
Ammonia	SM4500-NH3B/C	500ml/Plastic	H_2SO_4	28
Chloride	EPA 300 rev2.1	500ml/Plastic	4^0C	28
Cr (Hexavalent)	SM3500-Cr D	500ml/Plastic	4^0C	1
Cyanide	EPA 335.4	500ml/Glass	NaOH	7
Total Organic Carbon	SM5310B-00	120 ml/Glass	H_2SO_4	28
Extractable Petroleum Hydrocarbons (EPH)	NJ OQA-QAM-025-REV7	1L/Amber Glass	H_2SO_4	28
Total Phenols	EPA 420.1	500ml/Glass	H_2SO_4	28
Polychlorinated Biphenyls (PCBs) and Pesticides	EPA 608	1L/Glass	4^0C	7 (extraction) 40 (analysis)
Mercury	EPA 245.1	500ml/Plastic	HNO_3	28

2.1.5 Groundwater Quality Results

Groundwater quality data were collected for the four quarterly monitoring periods and used to continue assessment of groundwater quality across the Site. In Table B2 of Appendix B, analytical results for each quarter are tabulated and compared to the applicable GWQS. Table B2 also identifies the compounds whose concentrations exceeded the GWQS. The groundwater quality results for 2017 are detailed and summarized in Section 3.

2.2 SURFACE WATER AND SEDIMENT QUALITY SAMPLING

Surface water and sediment samples are collected and submitted to the NJDEP by the City of Jersey City consistent with the requirements established by the NJDEP and the applicable regulatory documents. Historically, the September 28, 1995 Record of Decision and the associated NJDEP Administrative Consent Order for the PJP Landfill dated September 29, 1997, required that the former responsible parties, CWM Chemical Services, LLC and Waste Management of New Jersey, Inc. (together referred to as “CCS”), conduct such surface water and sediment quality sampling. This responsibility was assumed by the City of Jersey City at the time of its acquisition of a portion of the former PJP Landfill in June of 2010, consistent with the terms of the Memorandum of Understanding executed by the City of Jersey City and the Third Amendment to the ACO executed by CCS, both dated June 18, 2010.

SAI regularly reviews this data provided by the City of Jersey City, and this report makes reference to the City of Jersey City sampling data. A more detailed report relating to the surface water and sediment sampling data is provided by the City of Jersey City to the NJDEP consistent with their ongoing obligations. Appendix D includes a summary of the compounds detected in the surface water and sediment samples.

As noted in previous environmental reports, the Hackensack River is tidally influenced and experiences semi-diurnal reversals of flow. These flow reversals result in mixing of the surface water along all surface water monitoring stations and can impact the interpretation of the results. SAI has requested that Jersey City instruct its environmental consultant to collect quarterly data from the five surface water sampling points at identical tidal times. Ideally, the data would be collected at slack tide between the ebb and flood tide. To date, SAI does not have reliable information concerning tidal conditions at the time of sample collection by the City of Jersey City.

2.2.1 Sampling Protocol

The five surface water sampling stations were sampled quarterly during 2017. This quarterly sampling was conducted on April 3, June 20, 21, and 22, October 3, 4 and 5, and December 6, 7 and 8, for the parameters identified below. However, with the exception of 1,4-dioxane, semi-volatile organic compounds were not analyzed for in the surface water and sediments in the second and fourth quarters. Surface water and sediment monitoring was performed by the City of Jersey City and the samples were analyzed by Integrated Analytical Laboratories, LLC (NJ Laboratory Certification #14751) of Randolph, NJ. Samples were analyzed for:

- TCL Volatile Organic Compounds;
- Semi-volatile organic compounds (SVOCs);
- TAL metals;
- Total suspended solids (TSS);
- Total dissolved solids (TDS); and
- Hardness.

Appendix D summarizes surface water and sediment results for all parameters that exceeded an applicable Surface Water Quality Standard ("SWQS") in 2017. The results are discussed below with the exception of 1,4-dioxane, which is addressed separately in Section 3.2.

2.2.2 Surface Water Quality Results

In 2017, metal parameters and SVOC parameters were detected above their applicable SWQS during the surface water monitoring that was conducted. Exceedances for 2017 surface water included the following parameters:

Metals

- Arsenic exceeded its most stringent SWQS (0.061 ug/L) during each of the four sampling quarters at monitoring stations SW-1 through SW-5. Concentrations ranged from 0.846 to 30.86 ug/L.
- Copper exceeded its most stringent SWQS (3.1 ug/L) at four stations (SW-1, SW-2, SW-3, and SW-5) during the first and third quarters. Copper exceeded its SWQS at three stations (SW-1, SW-2, and SW-5) during the second quarter, and at all five stations (SW-1 through SW-5) during the fourth quarter. Concentrations ranged from 1.7 to 394.5 µg/L.
- Manganese exceeded its SWQS (100 ug/L) at three stations (SW-3 through SW-5) during the first quarter, and at all stations (SW-1 through SW-5) during the second, third, and fourth quarters. Concentrations ranged from 93.12 to 1,181 ug/L.
- Mercury exceeded its SWQS (0.051 ug/L) at three sampling stations (SW-1, SW-2, and SW-5) during the second quarter. Exceedances occurred at four sampling stations (SW-1 through SW-4) during the third quarter. Exceedances occurred at four sampling stations (SW-1, SW-2, SW-3, and SW-5) during the fourth quarter. There were no exceedances during the first quarter. Concentrations ranged from non-detect to 3.16 ug/L.

SVOCs

- Benzo(a)anthracene exceeded its SWQS (0.18 ug/L) during the third quarter at stations SW-1 and SW-3. Concentrations ranged from non-detect to 0.65 µg/L.
- Benzo(a)pyrene exceeded its SWQS (0.018 ug/L) during the first quarter at sampling station SW-3. Exceedances during the third quarter occurred at three sampling stations (SW-1 through SW-3). Concentrations ranged from non-detect to 0.66 ug/L.
- Benzo(b)fluoranthene exceeded its SWQS (0.18 ug/L) during the third quarter 2017 sampling event at sampling stations SW-1 and SW-3. Concentrations ranged from non-detect to 1.1 ug/L.
- Bis(2-ethylhexyl)phthalate exceeded its SWQS (2.2 ug/L) during the third quarter at sampling station SW-3. Concentrations ranged from non-detect to 11 ug/L.
- Indeno(1,2,3-cd)pyrene exceeded its SWQS (0.18 ug/L) during the third quarter at SW-3. Concentrations ranged from non-detect to 0.44 ug/L.

In summary, four metals were detected above their applicable SWQS at the surface water monitoring stations. However, there is significant inter-quarterly variation in metal concentrations at all surface water monitoring locations, with exceedances not occurring during all sampling events and/or at all monitoring locations. These conditions, combined with the absence of any consistent concentration exceedances and/or upward trend, indicate that the metal concentrations on-site are generally stable, and are not expected to increase over time. This is further supported by the fact that these results are consistent with the results from previous surface water data summarized in previous Annual Reports. In addition, a number of exceedances occurred at background monitoring station SW-5.

SVOC exceedances occurred in 2017 at three monitoring surface water stations, SW-1, SW-2, and SW-3, for the two quarters for which they were sampled, the first (March) and third (September). Only two SVOC exceedances occurred during the first quarter, with the remaining exceedances occurring during the third quarter, and only at sampling station SW-3. The concentrations of the exceedances were relatively low. It should be noted that in 2017, there were no known discharges into surface water from the Site, other than normal daily groundwater-surface water interactions.

2.2.3 Sediment Quality Results

Appendix D includes the sediment sampling results for each quarter of 2017. The exceedances of the sediment data were determined by comparing the results to the applicable NJDEP Ecological Screening Criteria ("ESC") for saline water.

Metals

- A total of 13 metals were detected above the ESC: arsenic; barium; cadmium; chromium (total); cobalt; copper; lead; manganese; mercury; nickel; selenium; silver; and zinc. Note that selenium only exceeded the ESC for one sample during one sampling event. With the exception of selenium, exceedances for all metals were consistently found in all five samples across all four quarters.

SVOCs

- Exceedances of the ESC were detected during the two quarters for which they were sampled, the first (March) and third (September). A total of 15 SVOC exceedances occurred during the March sampling event: acenaphthene; acenaphthylene; anthracene; benzo(a)anthracene; benzo(a)pyrene; benzo(g,h,i)perylene; benzo(k)fluoranthene; chrysene; dibenzo(a,h)anthracene; bis(2-ethylhexyl)phthalate; fluoranthene; fluorine; indeno(1,2,3-cd)pyrene; phenanthrene; and pyrene. During this sampling event, exceedances of these parameters occurred at Stations SW-1, SW-2, SW-4, and SW-5. Station SW-3 had only an exceedance of bis(2-ethylhexyl)phthalate.

  A total of 19 SVOC exceedances occurred during the September sampling event: acenaphthene; acenaphthylene; anthracene; benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; butyl benzyl phthalate; chrysene; dibenzo(a,h)anthracene; bis(2-ethylhexyl)phthalate; fluoranthene; fluorine; indeno(1,2,3-cd)pyrene; 2-methylnapthalene; naphthalene; phenanthrene; and pyrene. Note that butyl benzyl phthalate only exceeded the ESC for one sample. 2-methylnapthalene exceeded the ESC for one sample as well. During this sampling event, most SVOC exceedances occurred at Stations SW-2, SW-3, and SW-4. In contrast, Station SW-5 only had an exceedance of acenaphthalene, while Station SW-1 did not have any SVOC exceedances.

Generally, the 2017 sampling results are consistent between the background monitoring stations and the sentinel stations, and are also consistent with the results from previous sampling events. The 13 metal exceedances in the sediment samples include the three metals detected in the surface water samples above their applicable SWQS, namely arsenic, manganese, and mercury. The 10 remaining metals were not detected above their applicable SWQS in surface water samples, indicating that the metals are generally not mobile but rather are sorbed to sediments, reducing their potential impact on surface water quality. In addition, some of the metals may at least partly originate from off-site sources (e.g., Hackensack River), given their presence at background station SW-5.

3.0 EVALUATION OF HISTORIC/CURRENT GROUNDWATER WATER QUALITY

Trend diagrams displayed on continuous time series plots (Appendix C) were prepared to depict groundwater concentrations for representative compounds that exceeded the GWQS in individual monitoring wells over time. Overall concentrations for historical parameters of concern appear to be relatively stable or declining during the timeframe commencing with the construction activity period of September 2012 through December 2014, and continuing through 2017.

Landfill parameters and metals are usually expected in groundwater impacted by landfill material; nonetheless, the 2017 groundwater data confirms the concentration trends for these parameters of concern are stable or declining at the Site. Concentration trends specific to certain wells or compounds including the BTEX source area and 1,4-dioxane are discussed in Sections 3.1 and 3.2, respectively.

3.1 BTEX Source Area at MW-8SR2

Monitoring well MW-8SR2 was installed on June 17, 2013, to replace abandoned well MW-8SR. Unlike the well it replaced, MW-8SR2 exhibited elevated concentrations of a number of parameters, including both organics and inorganics. These elevated concentrations occurred during all three sampling events in 2013, as well as the four sampling events conducted in years 2014, 2015, and 2016. Since the first sampling event performed in July 2013, all four BTEX compounds exhibit an overall decrease in concentrations. Based upon the relative concentrations of the four elevated BTEX compounds and the decreasing presence of lead, this source appears to represent an old gasoline source.

The groundwater quality sampling results from 2017 confirm the continued presence of high BTEX concentrations at MW-8SR2. During the four sampling events in 2017, the highest contaminant concentrations of all four BTEX compounds measured in MW-8SR2 occurred in June. For example, toluene, the BTEX compound with the highest concentrations, had a measured concentration of 36,800 parts per billion (ppb) in the second sampling quarter. While this concentration is still less than the 46,300 ppb originally measured in MW-8SR2 in July 2013, it is among the highest concentrations measured after this first sampling event. However, for the other three sampling events in 2017, toluene concentrations in MW-8SR2 were among the lowest historically, ranging from 1,500 ppb to 4,160 ppb, with the lowest concentrations occurring in the third and fourth sampling quarters.

The other three BTEX compounds measured in MW-8SR2 were not only significantly lower during the third and fourth sampling events, similar to toluene, but also were the lowest concentrations historically measured in MW-8SR2. The concentrations also approached and in one instance dropped below their applicable GWQSs. For example, during the third and fourth quarters of 2017, benzene concentrations in MW-8SR2 were 33.5 ppb and 27.6 ppb, respectively. These values not only represent the two lowest concentrations measured in this well for 2017, but also the lowest concentrations ever measured in this well dating back to its first sampling event in July 2013, when the highest concentration of 105 ppb was measured. Similarly, total xylene concentrations measured in the third and fourth sampling quarters of 2017 were the lowest ever measured in this well, with values of 2,640 ppb and 2,290 ppb, respectively, far below its initial concentration of 14,600 ppb measured in July 2013. Similarly, the lowest ethylbenzene concentrations measured in MW-8SR2 also occurred during the third and fourth sampling quarters of 2017, with concentrations of 838 ppb and 661 ppb, respectively. For the first time, concentrations for this contaminant in MW-8SR2 dropped below the previous low of 1,500 ppb.

With respect to downgradient monitoring wells, in 2016, before MW-4S became inaccessible for sampling, of the four BTEX compounds only benzene was detected above its applicable GWQS of 1 ppb, with concentrations on the order of 7 ppb. While the other three BTEX compounds were detected in MW-4S, their concentrations were always far below their applicable GWQS, with concentrations of 5.4 ppb or less.

Upgradient monitoring well MW-1SR also had benzene above its applicable GWQS during all four sampling events, ranging between 3 ppb and 3.9 ppb. The continued presence of benzene at low concentrations at MW-1SR and MW-4S in 2016 is consistent with historical data for the Site, where benzene has often been measured in different monitoring wells.

The surface water sampling stations generally had non-detect BTEX concentrations, but when present were below their applicable GWQS. For example, for the March 2017 sampling quarter, toluene was measured at SW-3 at 3.8 ppb, far below its GWQS of 700 ppb. For the June 2017 quarter, toluene was measured in SW-3 at 3.2 ppb and in SW-4 at 0.19 ppb. During the September 2017 sampling event, toluene was measured in SW-3 at 0.88 ppb and in SW-4 at 0.21 ppb. During the December 2017 sampling event, toluene was measured at SW-3 at 0.35 ppb in SW-3 and at a ppb and at 0.26 ppb at SW-4. Toluene was not detected at any of the other three surface water sampling stations in 2017.

In 2017, only surface water station SW-3 had any measured concentrations for the three other BTEX compounds. During the June 2017 sampling event, benzene was measured at 0.3 ppb, ethylbenzene at 0.52 ppb, and total xylenes at 0.82 ppb, far below their corresponding GWQS's of 1 ppb, 700 ppb, and 1,000 ppb, respectively. In December 2017, ethylbenzene was measured at 0.19 ppb and total xylenes at 0.42 ppb. Benzene, ethylbenzene, and total xylenes were not detected at the other four sampling stations during any of the four sampling events.

Collectively, the recent absence of the other three BTEX compounds in MW-4S and the near absence of all four BTEX compounds in the sentinel/compliance monitoring stations indicate that the old gasoline source near MW-8SR2 is quickly attenuating with distance from the source, and at this time does not pose a risk to surface water. This further indicates some combination of contaminant dispersion and natural degradation in the groundwater system, which is typical of hydrocarbon related organics. The rapid attenuation of the BTEX compounds from MW-8SR2 is expected, as these organic compounds typically have high degradation rates in groundwater (i.e., half-lives that are often much shorter than one year) and, consequently, are not expected to migrate far from this area at high concentrations.

The nearly complete absence of BTEX compounds in the deep sentinel wells indicates that the BTEX from this source area is not impacting the deeper aquifer. In fact, BTEX is nearly absent from the three deep monitoring wells on the Prologis parcel, with all measured concentrations below applicable GWQS.

Specifically, in 2017, benzene was not detected in MW-1DR or MW-8DR3 during all four quarters. At MW-4D, the highest measured benzene concentration was 0.89 ppb, which is below the GWQS of 1 ppb. Ethylbenzene was not detected at MW-4D. At MW-1DR, the only non-detect for ethylbenzene was 0.3 ppb, while the highest measured concentration at MW-8DR3 was 2.9 ppb, both of which are far below the applicable GWQS of 700 ppb. Toluene was detected just once at MW-1DR at 1.6 ppb. The highest measured toluene concentration at MW-4D was 13.5 ppb while at MW-8DR3 the highest concentration was 20.9 ppb, with both concentrations being well below the GWQS of 600 ppb. Total xylenes were measured just once at MW-1DR at a concentration of just 0.54 ppb. At MW-4D, the highest total xylenes concentration was 12.4 ppb, while at MW-8DR3 the highest concentration was 6.9 ppb, with both concentrations far below the GWQS of 1000 ppb.

Therefore, as in past years, this groundwater and surface water quality data collectively demonstrate that BTEX impacts to the deeper semi-confined unit are minimal, and that higher concentrations are restricted to the shallow unconfined unit in near proximity to MW-8SR2.

As presented in previous annual groundwater monitoring reports, the relative concentrations among the different constituents for the BTEX contaminants are representative of a weathered hydrocarbon source, indicating that this BTEX contamination preceded the Site redevelopment. Specifically, benzene has very low concentrations relative to toluene, ethylbenzene, and xylene, which in turn have similar concentrations to each other. This indicates the presence of an old hydrocarbon source.

The presence of a hydrocarbon source is further supported by the overall decrease in concentrations of lead, a previously used additive to gasoline, at MW-8SR2. This decrease is shown by its trend diagram. The other monitoring wells exhibit lower lead concentrations, further indicating that this metal may be associated with an old gasoline source in the vicinity of MW-8SR2.

Another organic compound that exhibited elevated concentrations at MW-8SR2 is chlorobenzene. During 2017, chlorobenzene slightly exceeded its applicable GWQS of 50 ppb during three of the four sampling events in this monitoring well, with exceedances ranging from 54.3 to 61.9 ppb. In 2016, chlorobenzene was also detected in MW-4S during its two sampling events (one duplicate sample), with concentrations ranging from 15.1 to 18.3 ppb, well below its applicable GWQS. Upgradient monitoring well MW-1S had very low concentrations of chlorobenzene, ranging from 2.2 ppb to 3.2 ppb. Before it became dry (inaccessible), the on-site monitoring well with the highest chlorobenzene concentrations was MW-5SR, with its higher concentrations ranging from approximately 60 ppb to 90 ppb. In the three deep monitoring wells, chlorobenzene was not detected during all four sampling quarters in 2017.

Chlorobenzene was generally absent from the surface water sampling stations, with very low concentrations measured intermittently in both sentinel and background surface water stations. For example, SW-3 had its highest concentration of 5.1 ppb during the first sampling quarter. Background monitoring station SW-4 had a measured concentration of 2.2 ppb during the second sampling event. Based upon these results, chlorobenzene also does not appear to represent a threat to potential receptors.

In general, other organic contaminants have decreased at MW-8SR2 since 2013. For example, acetone concentrations in this well have declined from concentrations of 6,110 ppb and 7,020 ppb in July 2013 and September 2013, respectively, above its applicable GWQS of 6,000 ppb, to less than 1,000 ppb in all subsequent sampling events. For example, in December of 2017, the acetone concentration within MW-8SR2 was 25.7 ppb. This compound has been measured at relatively low concentrations in all other monitoring wells, with the highest measured concentration occurring in MW-4D in December 2015 at 257 ppb. In December of 2017, the acetone concentration in MW-4D had decreased to 29.5 ug/L. The parameter 2-Butanone has also shown a very similar decreasing concentration trend, from a high of 2,860 ppb in September 2013 to consistently below its applicable GWQS of 300 ppb since June 2014. This parameter was not detected in any monitoring wells during the December 2017 sampling event.

In summary, for the BTEX source area at MW-8SR2, although a number of the organic compounds are higher than their applicable GWQS, the concentrations have declined significantly since 2013, and all show an overall decreasing trend. As is typical of landfills, there has been some inter-quarterly variation. This has also occurred with the organic Tentatively Identified Compounds (TICs) and SVOCs, with the more recent concentrations lower than those in 2014.

3.2 FILL

As is typical of older landfills, the Site historically has had a number of elevated compounds. However, the primary contaminant of concern in the fill is 1,4-dioxane. As has been established in previous reports and as further discussed below, this compound was present at the landfill prior to the redevelopment by Prologis. In addition, this compound is ubiquitous across the Site and former PJP Landfill as a whole. It has been consistently present in numerous monitoring wells on both the Jersey City parcel and the Prologis parcel.

Review of 2017 groundwater and surface water data for the Jersey City and Prologis portions of the former PJP Landfill indicates that 1,4-dioxane is present throughout the entire former landfill. Based on available historic evidence, this compound existed throughout the landfill prior to any construction activities at the Prologis portion of the site. There is no evidence that the Site redevelopment is responsible for the appearance of this compound in monitoring wells and surface water monitoring stations. In fact, concentrations of 1,4-dioxane have generally been decreasing over time in groundwater on the Prologis portion of the site since commencement of targeted analysis for this parameter began in July 2010, which is before significant construction activities began.

Although laboratory analysis for 1,4-dioxane did not begin at the Site until July 2010, it is clear from the TIC data that this parameter existed at elevated concentrations before construction activities commenced in both the shallow and deep monitoring well locations on both the Jersey City portion and the Prologis portion of the former landfill. Specifically, a detailed review of the historical groundwater data collected at the Site indicates the presence of 1,4-dioxane as a presumptive TIC based on the mass spectral identification in the preconstruction data of April and May of 2008.

Of particular importance in this data set is the presence of 1,4-dioxane in the groundwater in April and May of 2008, prior to the construction of the CMC test pads and implementation of the site wide construction. In addition, the laboratory deliverables for 1,4-dioxane contain sufficient evidence that 1,4-dioxane was present in the groundwater on the adjoining City of Jersey City property prior to April 2008, when construction on the Site began. Further, the data consistency between the historical groundwater data and the data compiled after construction of the CMC test pads, implementation of site wide relocation of fill materials, and construction of the engineering controls, provides additional evidence that the 1,4-dioxane on-site was ubiquitous and pre-existent across the entire former PJP Landfill and unrelated to the Site redevelopment.

Specifically with respect to the Prologis parcel, the highest measured concentrations in 2017 in the shallow unconfined unit occurred in MW-8SR2, see Table B2 in Appendix B, with measured concentrations ranging between 63.3 ppb and 107 ppb. These concentrations, which represent a decrease from 2016 sampling results, continue the significant decline from the 1,160 ppb concentration measured in this monitoring well in July 2013.

As previously discussed in Appendix H and Section 2.1.1, monitoring wells MW-4S and MW-5SR could not be sampled in 2017. Prior to becoming inaccessible in later 2015, monitoring well MW-5SR had 1,4-dioxane concentration ranging from 2,810 ppb to 3,000 ppb. In 2016, prior to becoming inaccessible, MW-4S had measured concentrations ranging between 333 ppb and 352 ppb. This is a significant decline from the concentrations above 1,000 ppb that were consistently measured in this monitoring well from June 2013 to September 2015.

In 2017, monitoring wells MW-1SR and MW-9SR, located on the eastern boundary of the Site, consistently had 1,4-dioxane concentrations ranging from 7.7 ppb to 44.6 ppb, which represent a decrease from 2016 sampling results.

In 2017, the concentrations for deep monitoring well MW-4D, which is adjacent to MW-4S, ranged from 128 ppb to 193 ppb. These concentrations are similar to those measured in this monitoring well since December 2015. Deep monitoring well MW-1DR has shown a steadily decreasing trend from approximately 300 ppb or higher before December 2015 to consistently less than 100 ppb since then, with the single exception of 116 ppb measured in September 2017.

Monitoring well MW-8DR3 had very low 1,4-dioxane concentrations in 2017. A lower detection laboratory analytical method (8270D by SIM) was required for 1,4-dioxane for this monitoring well, as all four quarters in 2017 had measured concentrations less than 1 ppb. While the first three quarters had concentrations below the applicable GWQS of 0.4 ppb, the fourth quarter had a concentration of 0.924 ppb. This well has had consistently low 1,4-dioxane concentrations, with no exceedances of the GWQS in 2016.

In general, for the primary contaminant of concern in the fill, 1,4-dioxane, concentrations in groundwater continued to decline over time at the Prologis parcel. The most recent sampling events show 1,4-dioxane has generally decreased in concentration with respect to time in groundwater across the Prologis Site, as measured in both the shallow and deep monitoring wells.

Also, because concentrations for 1,4-dioxane as well as other contaminants of concern in the deep monitoring wells at the Site have generally been low and consistent over time through 2017, Prologis is requesting that sampling of the three deep monitoring wells be terminated as per the approved Amended Design Report.

With respect to surface water, Table 6 presents the 2017 analytical results for the 1,4-dioxane sampling in the five surface water sampling stations using the 8270 SIM Method. While the samples were analyzed using both the 8270D SIM Method and the 8260C Method, the 8270D SIM Method provided a much lower detection limit. While the 8260C Method provided a detection limit of 61 ug/L, the 8270D SIM Method provided a detection limit ranging from 0.0721 to 0.0893 ug/L. There was a high level of agreement between duplicate samples collected from both SW-4 and SW-5 during select sampling events.

Table 6. Analytical Results for 1,4-dioxane at Surface Water Monitoring Locations Using Method 8270D (SIM) for the Four Quarterly Sampling Events in 2017

Location	Monitoring Component	1st Q 2017	2nd Q 2017	3rd Q 2017	4th Q 2017
		(ug/L)	(ug/L)	(ug/L)	(ug/L)
SW-1	Downgradient Sentinel/Compliance	3.52	324B*	361	249
SW-2	Downgradient Sentinel/Compliance	1.55	1.39	0.423	0.424
SW-3	Downgradient Sentinel/Compliance	82.1	91.2	39.6	17
SW-4	Background	47.5	95.9	17	49.2
SW-4 Duplicate	Background	NDA	91	NDA	NDA
SW-5	Background	0.478	0.412	0.2	0.297**
SW-5 Duplicate	Background	0.432	NDA	0.205	0.32**

Note: NDA denotes no duplicate analysis performed

*Found in Blank

**As per the Analytical Result Summary Table provided by Boswell Engineering

In general, there is variability in concentrations not only between sampling stations but also between sampling events. Of the five surface water monitoring stations, background monitoring station SW-5 (located upstream on the Hackensack River) and sentinel compliance station SW-2 (located at the confluence of the Hackensack River and the Sip Avenue Ditch) consistently had 1,4-dioxane concentrations at or less than 1.55 ppb during all four 2017 sampling events, which is almost in exact agreement with the 2016 sampling results.

Of the remaining three surface water sampling stations, SW-1, a compliance monitoring point located on the Hackensack River, generally had the highest 1,4-dioxane concentrations with values ranging between 249 ppb to 361 ppb for the second, third and fourth sampling events, while the first 2017 sampling event in April, showed a 1,4-dioxane concentration of 3.52 ppb.

Surface water station SW-3, a compliance monitoring point located midway of the Sip Avenue Ditch, had 1,4-dioxane concentrations ranging from 17 ppb to 91.2 ppb. Background monitoring station SW-4, located at the upper end of the City of Jersey City property on the Sip Avenue Ditch, had 1,4-dioxane concentrations ranging from 17 ppb to 95.9 ppb.

To further assess possible sources and pathways for 1,4-dioxane in surface water, the 2017 sediment sample results for this contaminant were reviewed for the five stations. Table 7 summarizes the analytical results.

Table 7. Measured 1,4-Dioxane Concentrations in Sediment at Surface Water Stations in 2017 (mg/kg)

Surface Water Station	1st Q 2017	2nd Q 2017	3rd Q 2017	4th Q 2017
1	ND	ND	ND	ND
2	ND	ND	0.0238	ND
3	0.041	13.3	ND	ND
4	ND	ND	0.00612	ND
5	ND	ND	ND	ND
5 Duplicate	ND	0.0189	ND	ND

Note: ND denotes non-detect

In general, the vast majority of the samples were non-detect, including the duplicate samples for SW-5. Of the 24 sediment samples taken, only five had measurable 1,4-dioxane concentrations. While there is no consistent or obvious correlation between the sediment results and the surface water quality results, SW-3, which after SW-1 had the highest surface water concentrations for 1,4-dioxane, did have measurable concentrations for this contaminant in sediment during two of the four sampling events. Still, the sediment data in combination with elevated 1,4-dioxane concentrations in surface water is too sparse to draw any conclusions at this time.

Overall, as to surface water quality, elevated 1,4-dioxane concentrations, relative to previous years, were present in two of the three sentinel compliance points, SW-1 and SW-3, as well as background monitoring point SW-4 in the SIP Ditch, while concentrations remained low at sentinel compliance point SW-2 and Hackensack River background monitoring station SW-5. Based on this limited data and inconsistent results from previous years, no clear trends for 1,4-dioxane can be inferred with respect to surface water quality. Furthermore, as indicated, sediment sampling results for 1,4-dioxane also do not provide a clear pattern at this time, nor do they correlate with the surface water quality results. Therefore, no definitive conclusions regarding the presence of 1,4-dioxane in surface water can be made at this time without additional surface water quality data collected in accordance with established protocol for the former PJP Landfill site.

To advance such efforts and to ensure that surface water quality sampling is performed in accordance with established former PJP Landfill site sampling protocol, including time of day with respect to tides and sampling locations, a representative of Prologis will be present during surface water sampling performed by the City of Jersey City. In addition, depending upon the surface water quality results from the first two sampling events of 2018, Prologis may also collect surface water samples during the third and fourth quarterly sampling events and have it analyzed by a different laboratory to help validate results. Using these results in possible combination with 2017 data, a more complete data set over time can be compiled to provide context to individual sampling events, and a more definitive confirmation and assessment of the presence of 1,4-dioxane in surface water can be performed to determine whether the elevated concentrations at select surface water sampling stations in 2017 were atypical events or an indication of a longer-term trend. Based on the results of this effort, additional fieldwork and analysis may be proposed for 2019.

To provide further context and facilitate a comprehensive evaluation of the former PJP Landfill as a whole, a review/comparison of 1,4-dioxane concentrations/groundwater quality measured on the Jersey City parcel was performed. Nine monitoring wells (with some duplicates) were sampled in 2017 on this parcel, with the 1,4-dixoane results summarized in Table 8

.

Table 8. Summary of Measured 1,4-Dioxane Concentrations in City of Jersey City Monitoring Wells in 2017

Location	1st Q 2017 (ug/L)	2nd Q 2017 (ug/L)	3rd Q 2017 (ug/L)	4th Q 2017 (ug/L)
MW-6S	180	NS	215	254
MW-7S	160	97.9	100	100
MW-10S	390	452	326	357
MW-11S	140	130	101	124
MW-12S	465	NS	NS	NS
MW-18S	39.5	20.1	55.8	36.3
MW-19S	18.5	20.1	28.3	33.8
MW-19S Duplicate	18.8	NDA	28.6	34.1
MW-20S	3	3.73	3.39	3.58
MW-20S Duplicate	NDA	3.65	NDA	NDA
MW-21S	ND	0.127	0.161	0.161

Notes: NDA denotes no duplicate analysis performed
ND denotes non-detect
NS denotes not sampled

As shown, the monitoring wells across the Jersey City parcel almost uniformly exhibited elevated 1,4-dioxane concentrations throughout 2017. For example, during the first 2017 sampling event in March, eight of the nine monitoring wells sampled on the Jersey City property had elevated concentrations of 1,4-dioxane. Moreover, five of the nine monitoring wells had 1,4-dioxane concentrations ranging between 140 ppb and 465 ppb. The 1,4-dioxane concentrations for the remaining three quarters of 2017 are very similar to the March 2017 sampling results. Note that monitoring well MW-12S, which had the highest measured 1,4-dioxane concentration at 465 ppb, was only sampled in the first quarter of 2017. However, this monitoring well had similarly high concentrations in 2016.

To provide a historical perspective of measured 1,4-dioxane concentrations at the Jersey City parcel, Table 9 summarizes the average concentrations in the four shallow monitoring wells on this parcel which have been consistently sampled since 2013.

Table 9. Mean Annual Concentrations of 1,4-Dioxane in Jersey City Monitoring Wells

Jersey City Wells	Mean 1,4-Dioxane Concentrations by Year (ug/L)				
	2013	2014	2015	2016	2017
MW-6S	25.4	189	188	166	216.3
MW-7S	85	92.7	178	118	114.5
MW-10S	37.1	247.3	380	265	381.3
MW-11S	33.8	451	315	90	123.8
Average	45	245	265	160	209

As shown, concentrations of 1,4-dioxane in the four Jersey City monitoring wells were significantly higher over the last four years compared to their concentrations in 2013.

It is important to note that numerous monitoring wells on the Jersey City parcel, including MW-10S, MW-11S, and MW-12S, which have among the highest 1,4-dioxane concentrations of the entire site, are located on the opposite side of the Sip Avenue Ditch hydraulically upgradient of the Prologis parcel. Therefore, these monitoring wells could not be impacted by groundwater originating from the Prologis parcel. This supports the conclusion that 1,4-dioxane is ubiquitous across the entire former PJP Landfill and has predated redevelopment by Prologis and the City of Jersey City.

With respect to inorganic compounds like metals, they continue to remain stable, with some inter-quarterly fluctuations, as is typical of landfills in general and Prologis in particular. For example, lead

(GWQS of 5 ppb) in the shallow unconfined unit, continues to consistently exhibit concentrations below 100 ppb. One exception was MW-9SR in the first event, with a concentration of 418 ppb, after which its concentrations ranged between just 1.3 to 9.7 ppb. Lead concentrations in the deeper semi-confined unit have been even lower, generally less than 5 ppb, with the highest measured concentration in any single event in 2017 was just 8.9 ppb during the fourth quarter at MW-1DR. MW-4D and MW-8DR3 had four quarters of non-detects.

Arsenic (GWQS of 3 ppb) in the shallow unconfined unit generally occurs at concentrations less than 5 ppb, with one larger spike occurring during the March sampling event at MW-9SR with 25.4 ppb. Arsenic concentrations are higher in the deeper semi-confined unit at MW-1DR, with concentrations ranging from 18.3 to 56.7 ppb in 2017, which are significantly lower than previous years when concentrations generally ranged between 60 to 112 ppb. In contrast, arsenic concentrations in the two remaining deep monitoring wells MW-4D and MW-8DR3 are significantly lower, with concentrations ranging from 1.35 to 7 ppb.

For iron (GWQS of 300 ppb) in the unconfined shallow unit, concentrations have slightly declined from 2013, and are relatively stable, generally ranging between 12,000 to 20,000 ppb. There was one spike of 44,600 in MW-9SR during the first quarter of 2017. However, iron concentrations in this monitoring well during the next three sampling events ranged between 597 ppb to 4,590 ppb. In the deeper semi-confined unit, iron concentrations have generally been stable over time since 2013, with measured concentrations generally between 7,000 ppb to 15,000 ppb, with one spike of 29,300 ppb, occurring in MW-4D during the second quarter of 2017.

For manganese (GWQS of 50 ppb) in the shallow unconfined aquifer, concentrations in MW-1SR and MW-8SR have been very consistent over time and very similar, ranging over a narrow range from 200 to 413 ppb in 2017. Manganese concentrations in MW-9SR have historically been higher with larger inter-quarterly variations, with concentrations in 2017 ranging from 597 ppb to 4,590 ppb. In the deeper unit, manganese concentrations in MW-1DR and MW-8DR3 have generally declined from what they were in 2013, decreasing from the general range of 300 ppb to 500 ppb in this earlier period to concentrations of 219 ppb or less in 2017. Monitoring well MW-4D had concentrations in 2017 generally ranging between 400 ppb to 600 ppb,

Overall, as demonstrated by the select metals above, concentrations in the fill and the deeper semi-confined units at the Site have remained fairly stable over time, with some compounds showing decreasing trends since 2013. However, similar to other landfills, there are inter-quarterly variations of some metals at select monitoring wells, but none that exhibit increasing concentration trends indicative of a changing condition in leachate or groundwater.

4.0 CONCLUSIONS

The results of the groundwater monitoring events conducted during 2017 are presented in this report. The results show that there has been no significant change in the type and number of parameters of concern identified in the upper and lower water bearing units present at the Site. The wells generally show the same inter-temporal variation in concentrations which is typical of landfills, and has historically been characteristic of the Site.

Monitoring well MW-8SR2 continues to exhibit a declining trend for the organic compounds that were detected in this well following its installation in June 2013. Based upon the initial relative concentrations of the BTEX compounds and the decreasing lead concentrations, it appears that the contaminants at this well originate from an old source (i.e., weathered product) unrelated to recent construction activities. It is expected that the concentrations will continue to decline over time as BTEX compounds are highly degradable with relatively short half-lives. The near absence of BTEX compounds at other monitoring locations hydraulically downgradient of MW-8SR2 and also in the deeper monitoring wells further supports the likelihood that BTEX compounds will continue to decline.

For the primary contaminant of concern in the fill, 1,4-dioxane, concentrations in groundwater continued to decline over time at the Prologis parcel. In surface water, elevated 1,4-dioxane concentrations, relative to previous years, were present in two of the three sentinel compliance points, SW-1 and SW-3, as well as background monitoring point SW-4 in the Sip Avenue Ditch, while concentrations remained low at sentinel compliance point SW-2 and Hackensack River background monitoring station SW-5.

Based on this limited data, its inconsistency with previous years, and lack of correlation with sediment sampling results for 2017, no clear trends can be inferred with respect to surface water. Additional surface water quality data is necessary to create a sufficiently complete data set over time to provide context to individual sampling events and determine whether the elevated concentration at select surface water sampling stations in 2017 were atypical events or an indication of a longer-term trend.

To advance a more definitive assessment of 1,4 dioxane in surface water and to ensure that surface water quality sampling is performed in accordance with established former PJP Landfill site sampling protocol, including time of day with respect to tides and sampling locations, a representative of Prologis will be present during surface water sampling performed by the City of Jersey City. In addition, depending upon the surface water quality results from the first two sampling events of 2018, Prologis may also collect surface water samples during the third and fourth quarterly sampling events and have it analyzed by a different laboratory to help validate results. Using these results in possible combination with 2017 data and other available information/data, a more reliable assessment of the presence of 1,4-dioxane in surface water can be performed. Based on the results of this effort, additional fieldwork and analysis may be proposed for 2019.

For 1,4-dioxane, the following inferences can be made:

(i) 1,4-dioxane is a pre-existing compound, omnipresent across the entirety of the former PJP Landfill (i.e., both the Jersey City parcel and the Prologis parcel) in elevated concentrations long before the commencement of construction activities at the Prologis Site.

(ii) 1,4-dioxane is present on the opposite side of the Sip Avenue Ditch underlying the Jersey City property which, pursuant to established groundwater flow, would not have been transported from the Prologis Site to the City of Jersey City property.

(iii) 1,4-dioxane was present in the groundwater on the adjoining City of Jersey City property prior to April 2008, which is also prior to construction of the CMC test pads and the commencement of site wide construction activities.

(iv) Recent sampling events show 1,4-dioxane has generally decreased in concentration with respect to time in groundwater across the Prologis Site, as measured in both the shallow and deep monitoring wells.

(v) While concentrations in groundwater have generally remained stable or even declined, there were elevated concentrations detected at select surface water monitoring stations in 2017, relative to previous years. Additional surface water quality data collected in accordance with the former PJP Landfill site sampling protocol is necessary to create a sufficiently complete data set over time to provide context to individual sampling events and determine whether the elevated concentration at select surface water sampling stations were atypical events or an indication of a longer-term trend.

With respect to metals in groundwater, concentrations of these compounds have generally remained consistent over time, with a few metals at some wells exhibiting inter-temporal variation as is typical of landfills in general and the Prologis portion of the PJP Landfill. If anything, some metals have exhibited decreasing concentration trends since 2013, with none exhibiting increasing concentration trends.

The 13 metal exceedances in the sediment samples include the three metals (namely arsenic, manganese, and mercury) that were detected in the surface water samples above their applicable SWQS. The 10 remaining metals were not detected above their applicable SWQS in surface water samples, thereby indicating that the metals are generally not mobile but rather are sorbed to sediments, reducing their potential impact on surface water quality. In addition, based on their presence at background monitoring station SW-5, some of the metals may at least partly originate from off-site sources (e.g., Hackensack River). There does not appear to be any clear or consistent connection between groundwater discharges from the Site and surface water quality in the Hackensack River.

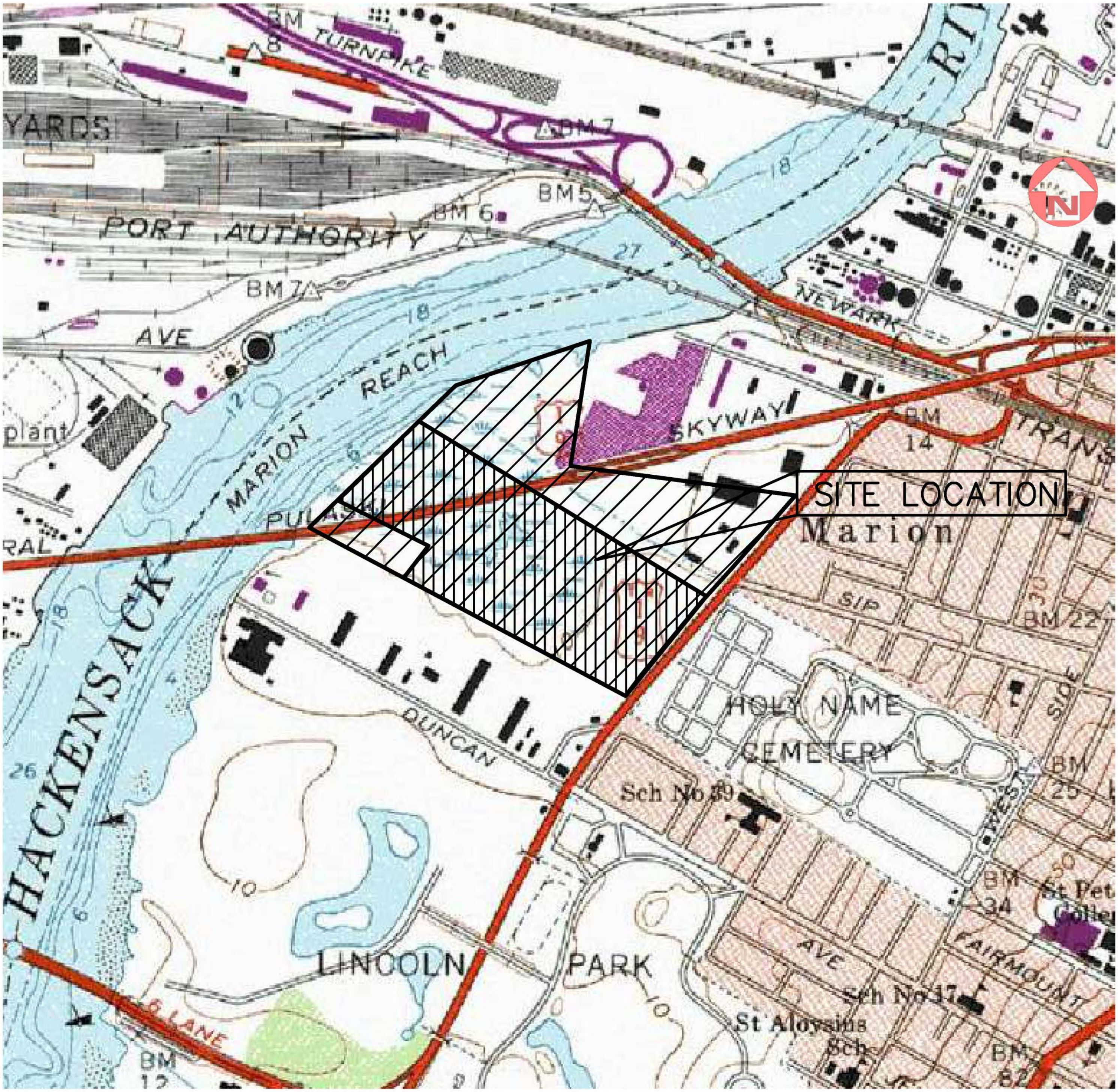
As in past years, it can be concluded that while there are natural fluctuations of certain contaminants in groundwater typically associated with landfills, measured groundwater quality conditions in both the shallow and deep monitoring wells overall have remained stable over time. For BTEX at the source area near MW-8SR2, groundwater quality conditions have improved in groundwater with overall minimal observed impacts to the Hackensack River.

In 2018, monitoring wells MW-4S and MW-5SR will be evaluated by a licensed well driller, and will either be repaired or replaced. If any of the wells is replaced, the replacement well will be installed as close as possible to the existing well, which will be properly sealed and abandoned by a licensed well driller.

Groundwater sampling of the Prologis parcel will continue to be coordinated with the groundwater and surface water quality sampling performed at the City of Jersey City parcel on behalf of the City. As has been done previously, groundwater and surface water quality data will be assessed by SAI to help identify any potential water quality changes.

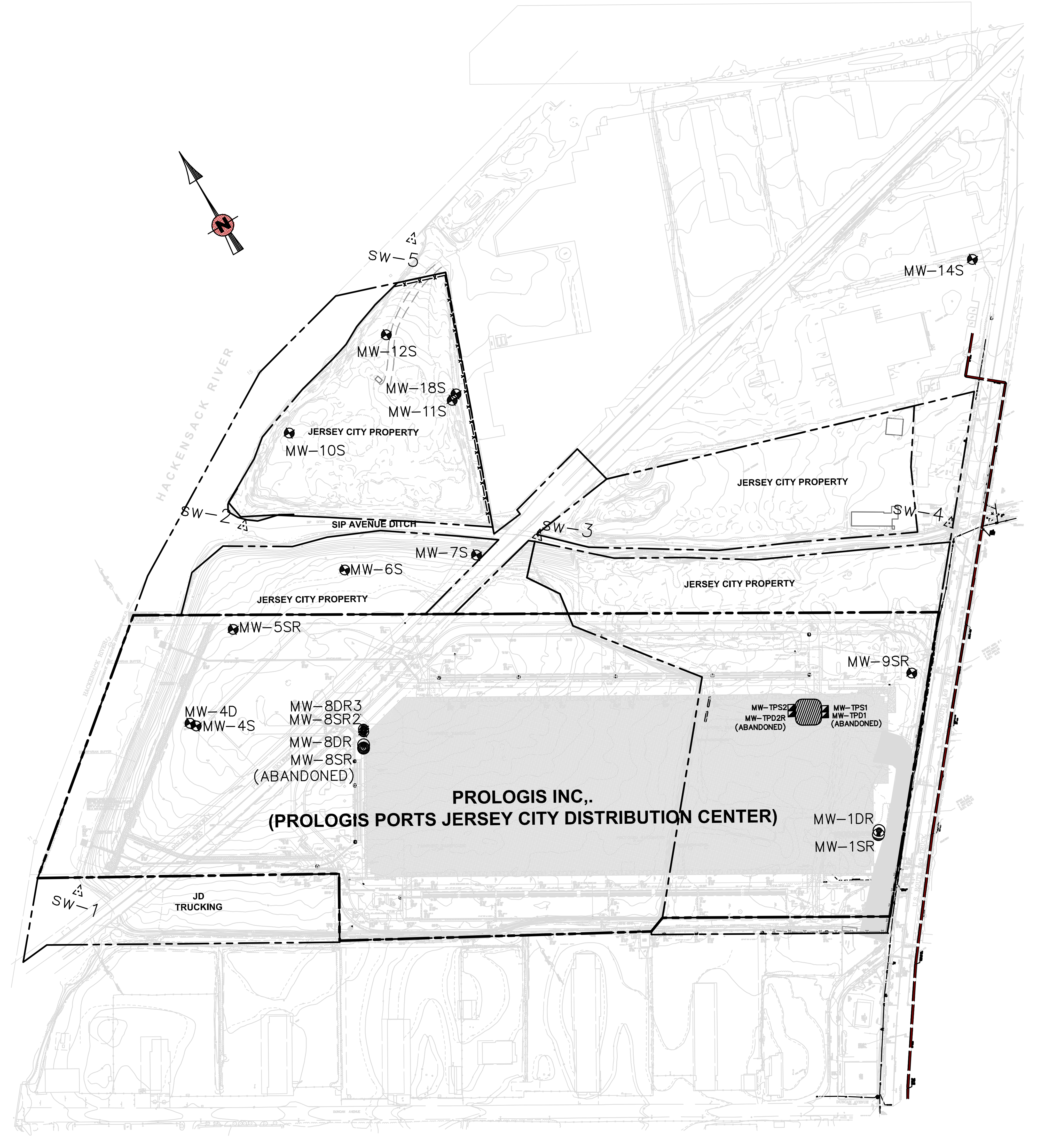
Lastly, because concentrations for 1,4-dioxane as well as other contaminants of concern in the deep monitoring wells at the Site have generally been low and consistent over time through 2017, Prologis is requesting that sampling of the three deep monitoring wells be terminated as per the approved Amended Design Report.

APPENDIX A
Figures



NOTE:
SOURCE: U. S. GEOLOGICAL SURVEY. JERSEY CITY QUADRANGLE.
7.5 MINUTE QUADRANGLE
USGS MAP PROVIDED BY MAPTECH: TERRAIN NAVIGATOR
655 PORTSMOUTH AVENUE, GREENLAND, NH 03840

SADAT ASSOCIATES INC. ENGINEERING & ENVIRONMENTAL SCIENCE 1545 LAMBERTON ROAD, TRENTON NJ 08611. (609) 826-9600 FAX (609) 826-9601	DESIGN BY JG	CHECKED BY	CERTIFICATE OF AUTHORIZATION NO. 24GA28015200
	PROJ MGR LC	STATUS (D) DRAFT (P) PRELIM (F) FINAL (C) CONSTRUCTION	
OWNER PROLOGIS INC,. (PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER) EAST RUTHERFORD, NJ	DRAWN BY JG	DRAWING TITLE PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER SITE LOCATION MAP	
	DATE 06/24/2014		
	SCALE 1"=2000'		
AUTOCAD PATH DWG PATH & NAME	JOB NO 06053-0101	DRAWING NO. **USG-01**	SHEET **1** OF **2** REV. **00**



MW-4S EXISTING MONITORING WELLS

MW-8SR2
MW-8DR3 NEW INSTALLED MONITORING WELLS AS REPLACEMENT OF MONITORING WELLS MW-8SR AND MW-8DR THAT HAVE BEEN ABANDONED

MW-TPS1
MW-TPS2 TEMPORARY TEST PLATFORM MONITORING WELLS (SHALLOW) {ABANDONED}

MW-TPD1
MW-TPD2R TEMPORARY TEST PLATFORM MONITORING WELLS (DEEP) {ABANDONED}

SW-1 SURFACE WATER MONITORING LOCATION

SITE BOUNDARY

300 150 0 300 600

1"=300'

NOT FOR CONSTRUCTION

REV. NO.	DATE	REMARKS

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CERTIFICATE OF AUTHORIZATION NO. 24GA28015200
PROJ MGR LC
STATUS D DRAFT P PRELIM F FINAL C CONSTRUCTION
DRAWN BY JG
DATE 6/24/14
SCALE 1"=300'
DRAWING TITLE PROLOGIS PORTS JERSEY CITY DISTRIBUTION CENTER ENVIRONMENTAL MONITORING LOCATIONS
JOB NO 06053-000
DRAWING NO. **FIGURE 2**
SHEET **2** OF **2**
REV.

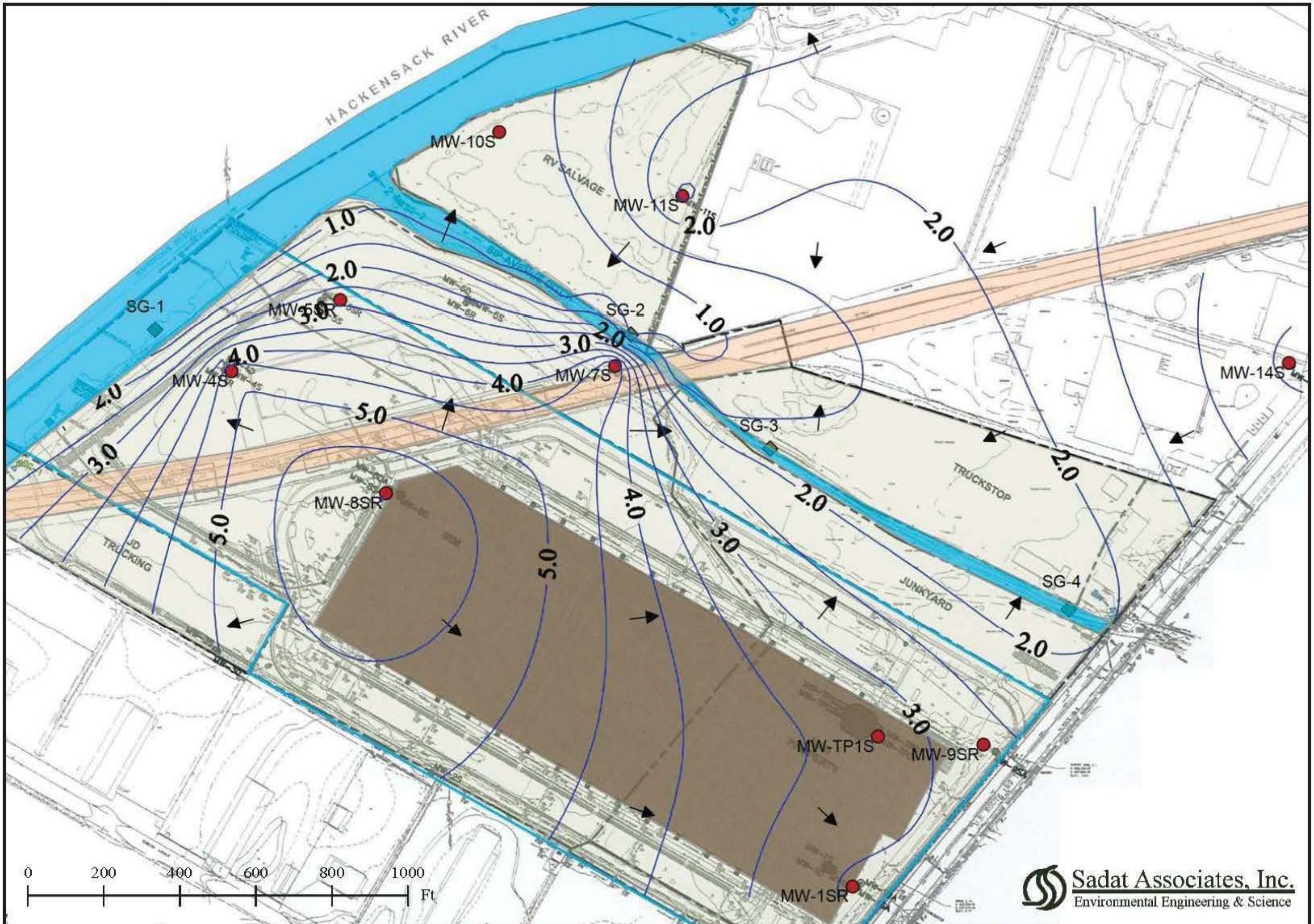


Figure 3. Average Groundwater Level Contour Map of Shallow Aquifer on September 16, 2012

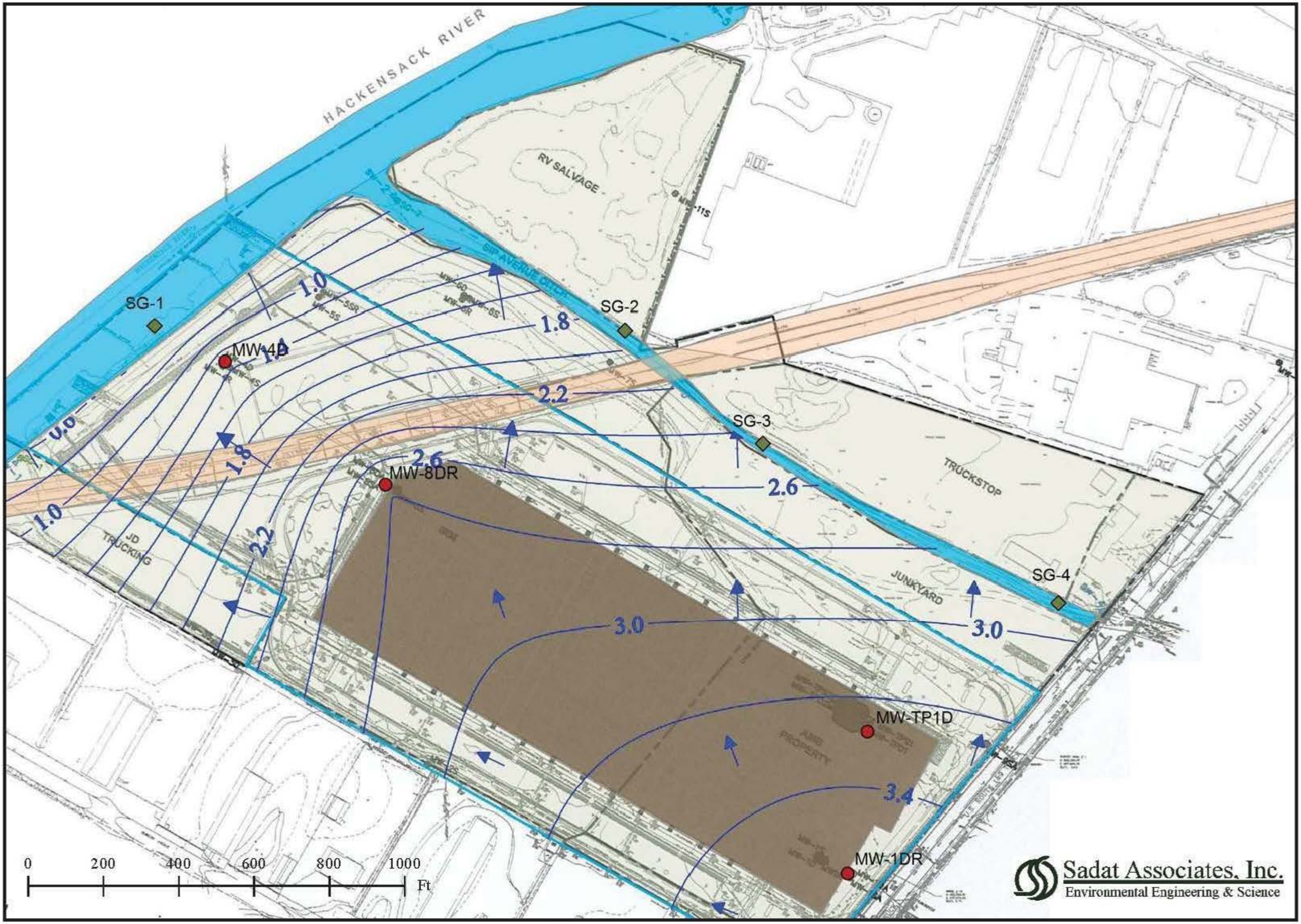


Figure 4. Average Groundwater Level Contour Map of Deep Aquifer on September 16, 2012

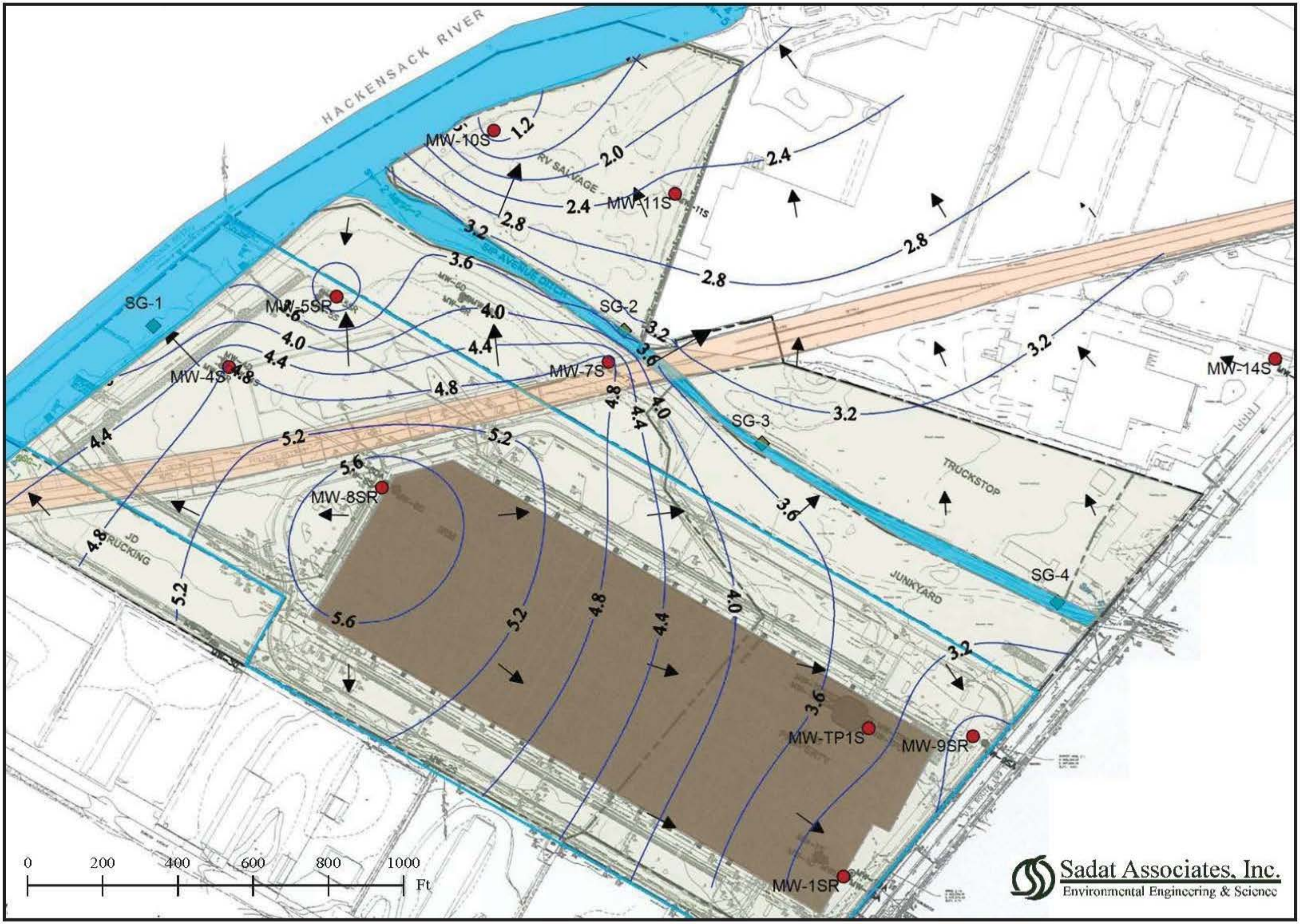


Figure 5. Groundwater Level Contour Map of Shallow Aquifer at High Tide on September 16, 2012

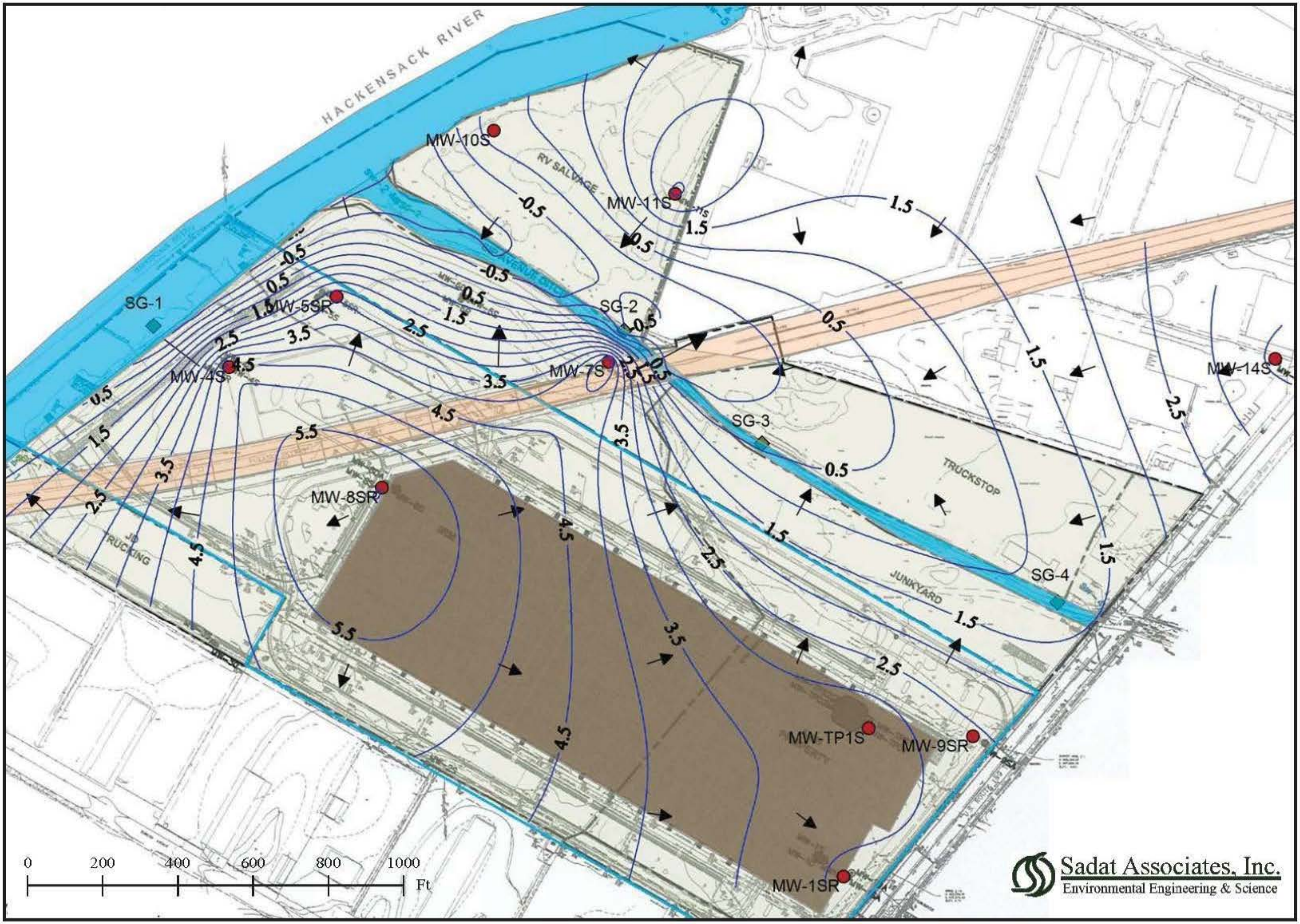


Figure 6. Groundwater Level Contour Map of Shallow Aquifer at Low Tide on September 16, 2012

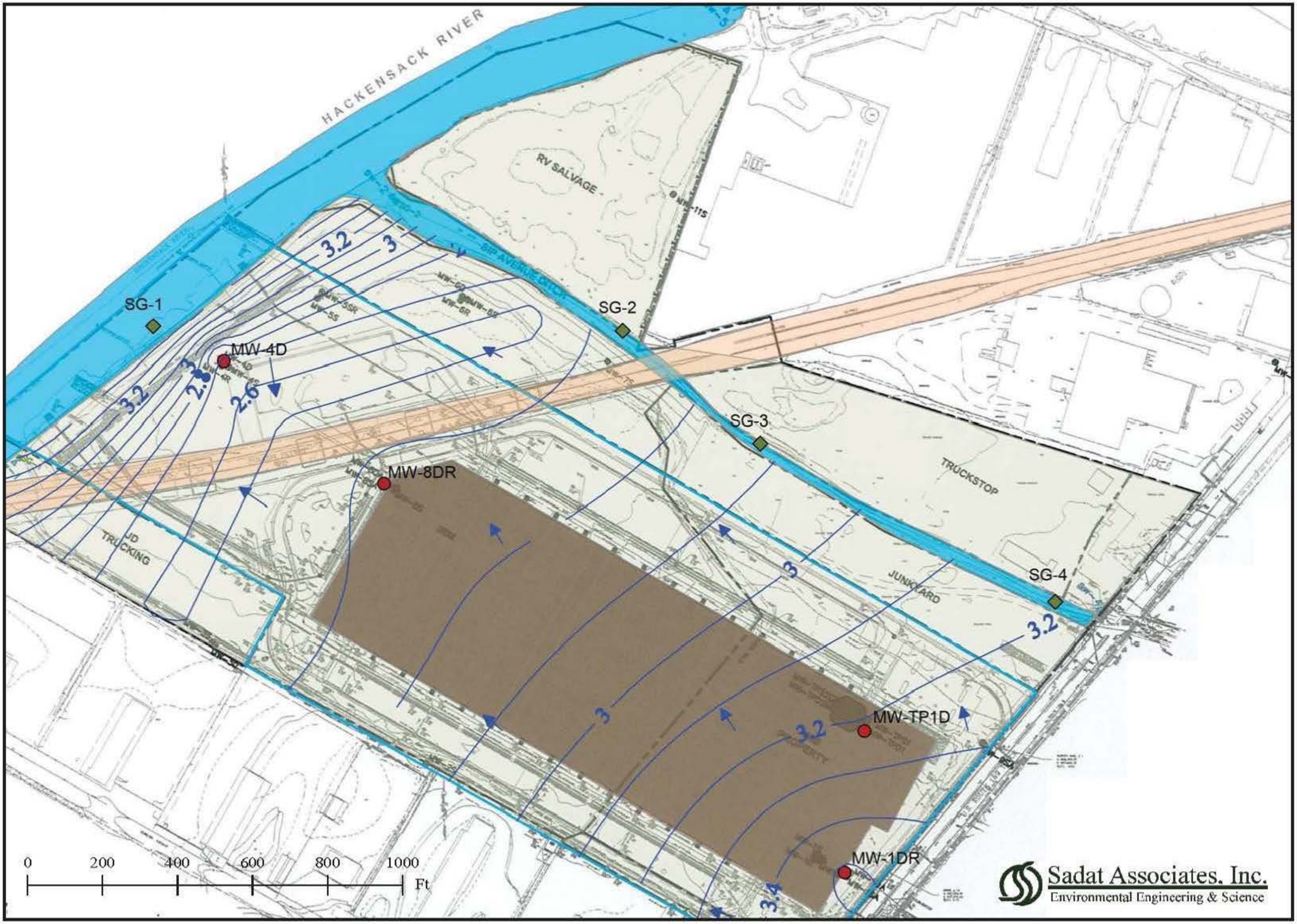


Figure 7. Groundwater Level Contour Map of Deep Aquifer at High Tide on September 16, 2012

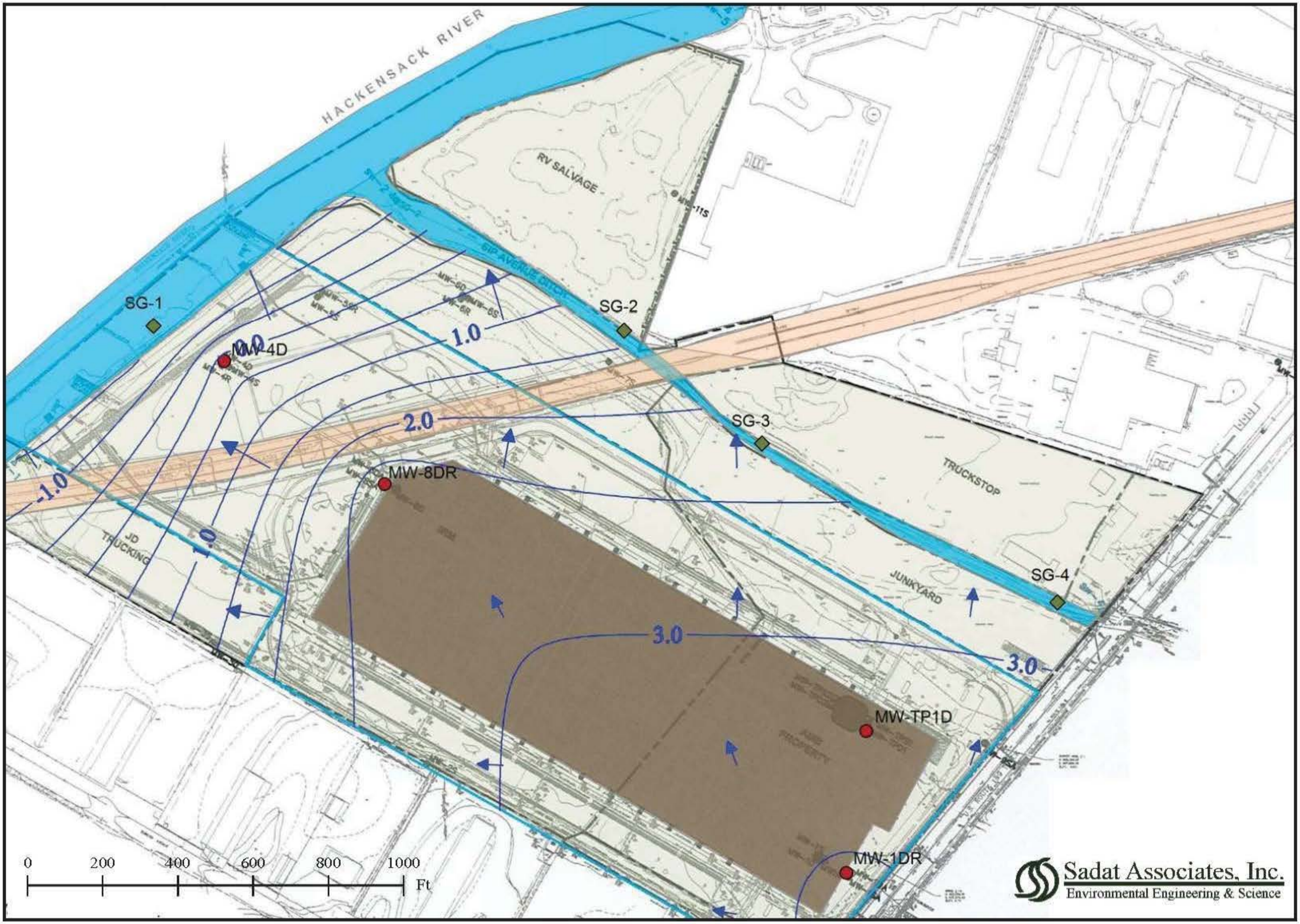
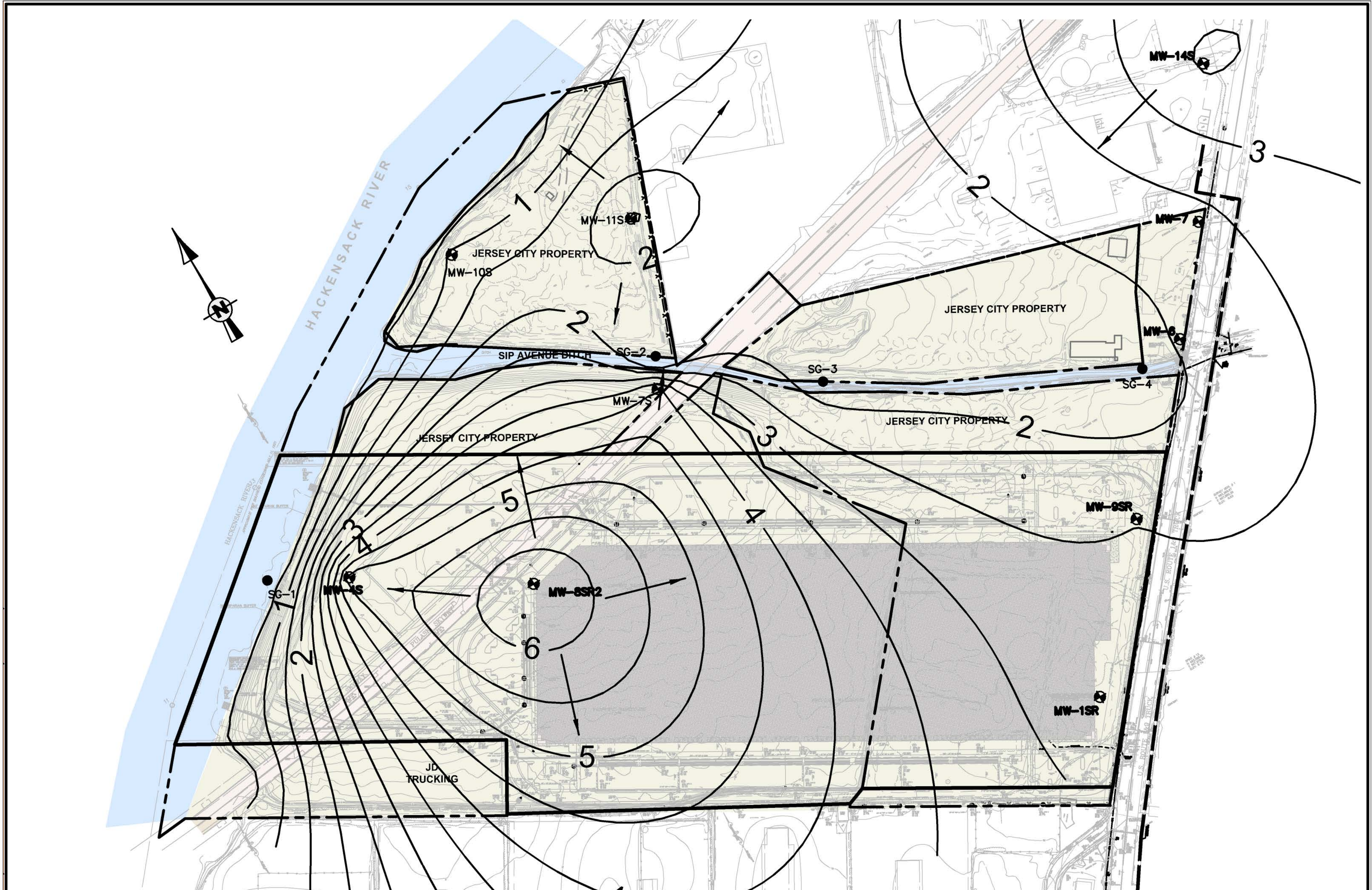


Figure 8. Groundwater Level Contour Map of Deep Aquifer at Low Tide on September 16, 2012



MW-4S EXISTING MONITORING WELLS

SITE BOUNDARY

FLOW DIRECTION

350 175 0

1"=350'

REV. NO.	DATE	REMARKS

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DESIGN BY	AV
PROJ MGR	LC
DRAWN BY	JG
DATE	02/20/18
SCALE	1"=350'
JOB NO	06053-000

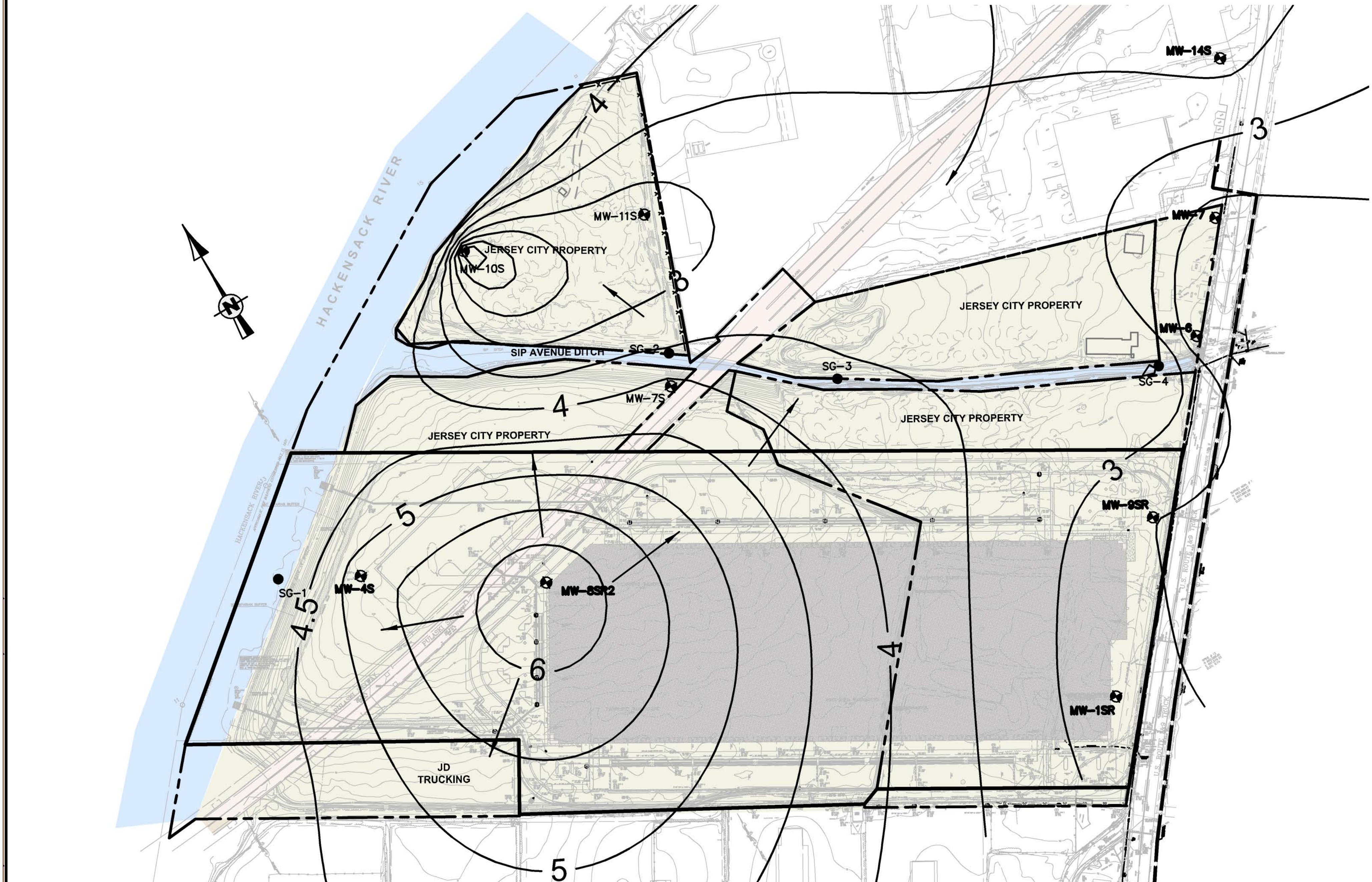
CHECKED BY

CERTIFICATE OF AUTHORIZATION NO. 24GA28015200

STATUS (D) DRAFT (P) PRELIM (F) FINAL (C) CONSTRUCTION

DRAWING TITLE
AVERAGE GROUNDWATER LEVEL CONTOUR MAP OF SHALLOW AQUIFER ON OCTOBER 16, 2017.

DRAWING NO. **FIGURE 9** SHEET OF REV.



MW-4S EXISTING MONITORING WELLS

SITE BOUNDARY

FLOW DIRECTION

350 175 0

1"=350'

REV. NO.	DATE	REMARKS

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DRAWN BY JG

DATE 02/20/18

SCALE 1"=350'

JOB NO 06053-000

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CERTIFICATE OF AUTHORIZATION NO. 24GA28015200

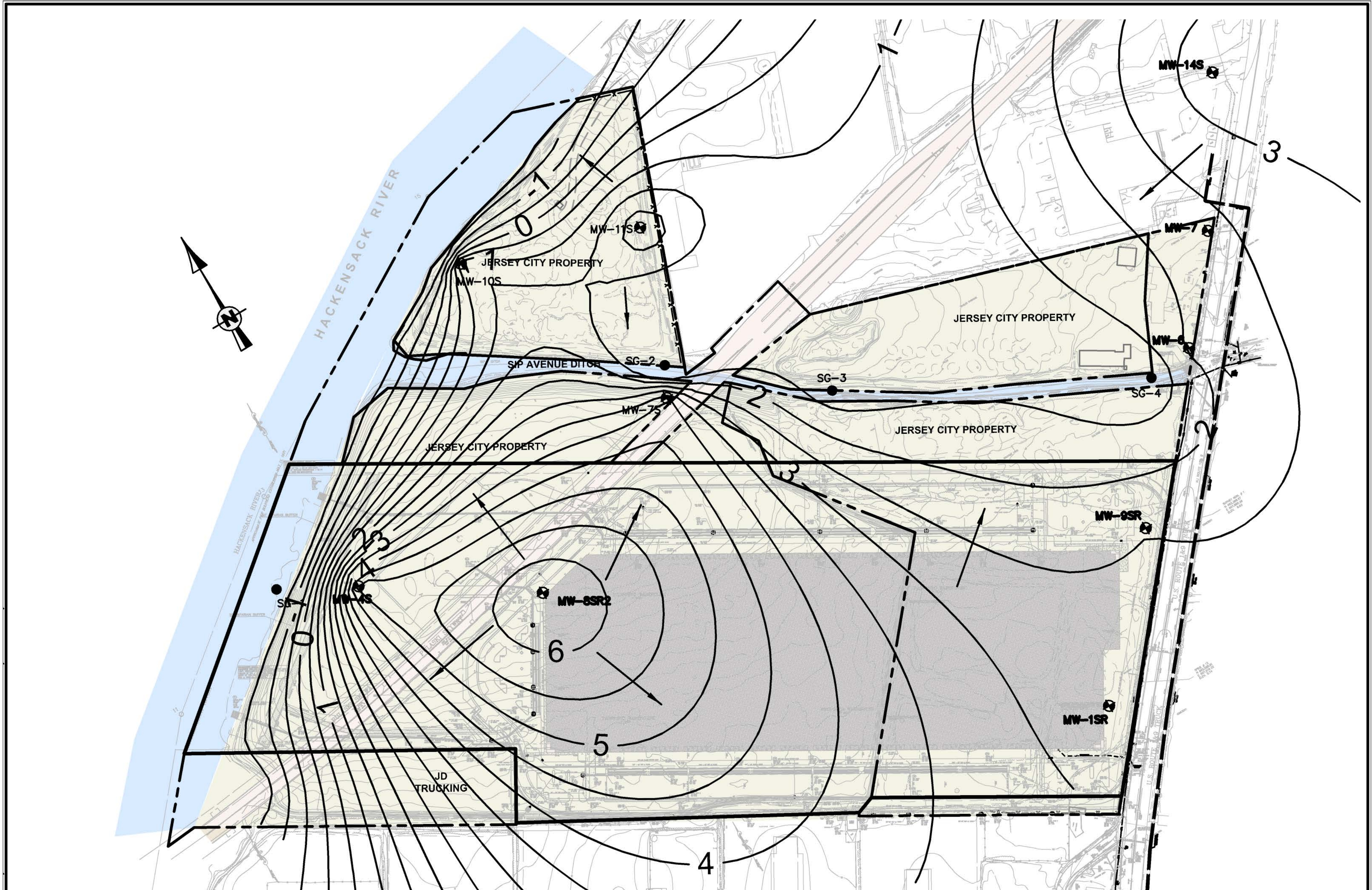
STATUS (D) DRAFT (P) PRELIM (F) FINAL (C) CONSTRUCTION

DRAWING TITLE
GROUNDWATER LEVEL CONTOUR MAP OF SHALLOW AQUIFER AT HIGH TIDE ON OCTOBER 16, 2017.

DRAWING NO. FIGURE 10

SHEET OF

REV.



MW-4S EXISTING MONITORING WELLS

SITE BOUNDARY

FLOW DIRECTION

350 175 0

1"=350'

REV. NO.	DATE	REMARKS

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PROJ MGR LC	STATUS (D) DRAFT (P) PRELIM (F) FINAL (C) CONSTRUCTION	
DRAWN BY JG	DRAWING TITLE	
DATE 02/20/18	**GROUNDWATER LEVEL CONTOUR MAP OF SHALLOW AQUIFER AT LOW TIDE ON OCTOBER 16, 2017.**	
SCALE 1"=350'		
JOB NO 06053-000	DRAWING NO. **FIGURE 11**	SHEET OF / REV.

APPENDIX B

Analytical and Groundwater Tables

PJP Landfill Site - JCTRuckSt+CheckCash+FuelST
235-353 Truck Route 1&9 (400 Sip Avenue)
Jersey City, NJ
Program Number 576808
Case Tracking Number: 93-3-4-0930-29
Block 11702 Lot Nos: 3 and part of 4

Table B1A - Summary of Collected Data for High and Low Tide for Event 1

Well ID	NJ State Plane Coordinates Surveyed Elevations Permit No.	Northing	Easting	Ground (ft. MSL)	Outer Casing (ft. MSL)	Inner Casing (ft. MSL)	Screen Interval (ft.)	Collector	Date Collected	Time Collected	Depth to Water (ft. below TOC)	PID Readings (ppm)	Groundwater Elevation (ft. MSL)
Overburden Wells													
HIGH TIDE at 0630													
MW-1	E201506489	693093	608241	12.13	12.13	11.78	5.0 - 12.0	Arcadis	10/16/2017	0721	8.90	3.6	2.88
MW-2	E201506490	693003	608253	10.53	10.53	10.10	5.0 - 13.0	Arcadis	10/16/2017	0719	7.39	44.9	2.71
MW-3	E201506491	693007	608305	10.71	10.71	10.32	5.0 - 12.0	Arcadis	10/16/2017	0717	7.96	102.4	2.36
MW-4	E201506492	692862	608228	8.96	8.96	8.64	5.0 - 12.0	Arcadis	10/16/2017	0716	6.39	31.9	2.25
MW-5	E201506493	692868	608118	9.45	9.45	9.14	5.0 - 10.0	Arcadis	10/16/2017	0714	6.18	0.7	2.96
MW-6	E201506494	692802	608167	8.33	8.33	7.93	5.0 - 10.0	Arcadis	10/16/2017	0712	5.83	0.3	2.10
MW-7	E201710557	693059	608380	11.30	11.30	10.88	5.0 - 15.0	Arcadis	10/16/2017	0723	8.54	26.3	2.34
MW-21S						16.86		Boswell	10/16/2017	0820	14.30	NA	2.56
MW-20S						11.67		Boswell	10/16/2017	0720	11.10	NA	0.57
MW-19S						7.12		Boswell	10/16/2017	0805	5.10	NA	2.02
MW-18S						6.80		Boswell	10/16/2017	0801	4.30	NA	2.50
MW-12S						21.51		Boswell	10/16/2017	--	--	--	--
MW-11S						19.74		Boswell	10/16/2017	0726	11.15	NA	8.59
MW-10S						23.40		Boswell	10/16/2017	0711	22.90	NA	0.50
MW-7S						18.11		Boswell	10/16/2017	0837	13.95	NA	4.16
MW-6S						22.95		Boswell	10/16/2017	0841	18.40	NA	4.55
MW-9SR	E201209313	692428.1	607804.6	11.5		11.57	2.7 - 12.7	Sadat Associates	10/16/2017	0733	9.07	NA	2.50
MW-8DR3	E201308743	693141.6	606252.8	18		18.77	36.0 - 46.0	Sadat Associates	10/16/2017	0709	16.29	NA	2.48
MW-8SR2	E201307823	693134.0	606250.5	18		19.44	10.0 - 20.0	Sadat Associates	10/16/2017	0712	12.89	NA	6.55
MW-5SR	E201003194	693602.5	606101.2	27.5		31.31	18.5 - 28.5	Sadat Associates	10/16/2017	0645	NA	NA	NA
MW-4D	26-15308-4	693431.7	605801.5	34.5		36.66	50.6 - 60.5	Sadat Associates	10/16/2017	0700	34.38	NA	2.28
MW-4S	26-15307-6	693414.6	605815.0	35.5		38.06	29.4 - 39.3	Sadat Associates	10/16/2017	0654	32.72	NA	5.34
MW-1DR	E201209312	692060.1	607469.7	17.8		19.74	22.8 - 32.8	Sadat Associates	10/16/2017	0727	16.8	NA	2.94
MW-1SR	E201209018	692049.7	607461.4	17.75		20	7.5 - 17.5	Sadat Associates	10/16/2017	0723	17.31	NA	2.69
LOW TIDE at 1253													
MW-1*	E201506489	693093	608241	12.13	12.13	11.78	5.0 - 12.0	Arcadis	10/16/2017	1302	8.70	NA	3.08
MW-2	E201506490	693003	608253	10.53	10.53	10.10	5.0 - 13.0	Arcadis	10/16/2017	1259	7.38	NA	2.72
MW-3*	E201506491	693007	608305	10.71	10.71	10.32	5.0 - 12.0	Arcadis	10/16/2017	1300	8.00	NA	2.32
MW-4	E201506492	692862	608228	8.96	8.96	8.64	5.0 - 12.0	Arcadis	10/16/2017	1257	6.40	NA	2.24
MW-5	E201506493	692868	608118	9.45	9.45	9.14	5.0 - 10.0	Arcadis	10/16/2017	1255	6.35	NA	2.79
MW-6	E201506494	692802	608167	8.33	8.33	7.93	5.0 - 10.0	Arcadis	10/16/2017	1253	5.84	NA	2.09
MW-7	E201710557	693059	608380	11.30	11.30	10.88	5.0 - 15.0	Arcadis	10/16/2017	1304	8.55	NA	2.33
MW-21S						16.86		Boswell	10/16/2017	1252	13.80	NA	3.06
MW-20S						11.67		Boswell	10/16/2017	1232	11.30	NA	0.37
MW-19S						7.12		Boswell	10/16/2017	1241	4.55	NA	2.57
MW-18S						6.80		Boswell	10/16/2017	1238	4.25	NA	2.55
MW-12S						21.51		Boswell	10/16/2017	--	--	--	--
MW-11S						19.74		Boswell	10/16/2017	1227	11.20	NA	8.54
MW-10						23.40		Boswell	10/16/2017	1222	22.00	NA	1.40
MW-7S						18.11		Boswell	10/16/2017	1300	13.95	NA	4.16
MW-6S						22.95		Boswell	10/16/2017	1305	18.40	NA	4.55
MW-9SR	E201209313	692428.1	607804.6	11.5		11.57	2.7 - 12.7	Sadat Associates	10/16/2017	1333	9.09	NA	2.48
MW-8DR3	E201308743	693141.6	606252.8	18		18.77	36.0 - 46.0	Sadat Associates	10/16/2017	1309	16.34	NA	2.43
MW-8SR2	E201307823	693134.0	606250.5	18		19.44	10.0 - 20.0	Sadat Associates	10/16/2017	1312	12.94	NA	6.50
MW-5SR	E201003194	693602.5	606101.2	27.5		31.31	18.5 - 28.5	Sadat Associates	10/16/2017	NA	NA	NA	NA
MW-4D	26-15308-4	693431.7	605801.5	34.5		36.66	50.6 - 60.5	Sadat Associates	10/16/2017	1300	36.21	NA	0.45
MW-4S	26-15307-6	693414.6	605815.0	35.5		38.06	29.4 - 39.3	Sadat Associates	10/16/2017	1254	32.8	NA	5.26
MW-1DR	E201209312	692060.1	607469.7	17.8		19.74	22.8 - 32.8	Sadat Associates	10/16/2017	1327	16.84	NA	2.90
MW-1SR	E201209018	692049.7	607461.4	17.75		20	7.5 - 17.5	Sadat Associates	10/16/2017	1323	17.32	NA	2.68

Notes:
Survey performed by: Keller & Kirkpatrick, Inc. in August 2015 for MW-1 through MW-6 and in October 2017 for MW-7.
Horizontal Datum: NJ State Place Coordinates System NAD83.
Vertical Datum: NAVD 88
Ft. MSL - Feet Mean Sea Level
TOC: Top of Casing
All Arcadis monitoring wells are flush mount wells with 2-inch PVC inner casing
* Well was being pumped at the time water level readings were measured

PJP Landfill Site - JCTRuckSt+CheckCash+FuelST
235-353 Truck Route 1&9 (400 Sip Avenue)
Jersey City, NJ
Program Number 576808
Case Tracking Number: 93-3-4-0930-29
Block 11702 Lot Nos: 3 and part of 4

Table B1A - Summary of Collected Data for High and Low Tide for Event 2

Well ID	NJ State Plane Coordinates Permit No.	Northing	Easting	Surveyed Elevations Ground (ft. MSL)	Outer Casing (ft. MSL)	Inner Casing (ft. MSL)	Screen Interval (ft.)	Collector	Date Collected	Time Collected	Depth to Water (ft. below TOC)	PID Readings (ppm)	Groundwater Elevation (ft. MSL)
Overburden Wells													
HIGH TIDE at 0620													
MW-1	E201506489	693093	608241	12.13	12.13	11.78	5.0 - 12.0	Arcadis	12/15/2017	0705	8.90	1.6	2.88
MW-2	E201506490	693003	608253	10.53	10.53	10.10	5.0 - 13.0	Arcadis	12/15/2017	0702	7.40	34.7	2.70
MW-3	E201506491	693007	608305	10.71	10.71	10.32	5.0 - 12.0	Arcadis	12/15/2017	0722	7.97	116	2.35
MW-4	E201506492	692862	608228	8.96	8.96	8.64	5.0 - 12.0	Arcadis	12/15/2017	0700	6.47	0.1	2.17
MW-5	E201506493	692868	608118	9.45	9.45	9.14	5.0 - 10.0	Arcadis	12/15/2017	0658	6.22	0.6	2.92
MW-6	E201506494	692802	608167	8.33	8.33	7.93	5.0 - 10.0	Arcadis	12/15/2017	0655	5.98	0.0	1.95
MW-7	E201710557	693059	608380	11.30	11.30	10.88	5.0 - 15.0	Arcadis	12/15/2017	0730	8.60	29.4	2.28
MW-21S						16.86		Boswell	12/15/2017	0710	11.77		5.09
MW-20S						11.67		Boswell	12/15/2017	0645	7.87		3.8
MW-19S						7.12		Boswell	12/15/2017	0635	4.53		2.59
MW-18S						6.80		Boswell	12/15/2017	0630	4.16		2.64
MW-12S						12.51		Boswell	12/15/2017	--	--	--	--
MW-11S						19.74		Boswell	12/15/2017	0650	9.86		9.88
MW-10						23.40		Boswell	12/15/2017	0658	21.32		2.08
MW-7S						18.11		Boswell	12/15/2017	0725	11.17		6.94
MW-6S						22.95		Boswell	12/15/2017	0720	16.16		6.79
MW-9SR	E201209313	692428.1	607804.6	11.5		11.57	2.7 - 12.7	Sadat Associates	12/15/2017	0948	9.34	NA	2.23
MW-8DR3	E201308743	693141.6	606252.8	18		18.77	36.0 - 46.0	Sadat Associates	12/15/2017	0644	16.84	NA	1.93
MW-8SR2	E201307823	693134.0	606250.5	18		19.44	10.0 - 20.0	Sadat Associates	12/15/2017	0648	12.9	NA	6.54
MW-5SR	E201003194	693602.5	606101.2	27.5		31.31	18.5 - 28.5	Sadat Associates	12/15/2017	0632	NA	NA	NA
MW-4D	26-15308-4	693431.7	605801.5	34.5		36.66	50.6 - 60.5	Sadat Associates	12/15/2017	0624	35.11	NA	1.55
MW-4S	26-15307-6	693414.6	605815.0	35.5		38.06	29.4 - 39.3	Sadat Associates	12/15/2017	0618	32.85	NA	5.21
MW-1DR	E201209312	692060.1	607469.7	17.8		19.74	22.8 - 32.8	Sadat Associates	12/15/2017	0703	17.05	NA	2.69
MW-1SR	E201209018	692049.7	607461.4	17.75		20	7.5 - 17.5	Sadat Associates	12/15/2017	0658	17.71	NA	2.29
LOW TIDE at 1250													
MW-1	E201506489	693093	608241	12.13	12.13	11.78	5.0 - 12.0	Arcadis	12/15/2017	1245	8.85	1.6	2.93
MW-2	E201506490	693003	608253	10.53	10.53	10.10	5.0 - 13.0	Arcadis	12/15/2017	1255	7.35	26.4	2.75
MW-3	E201506491	693007	608305	10.71	10.71	10.32	5.0 - 12.0	Arcadis	12/15/2017	1250	7.94	66.9	2.38
MW-4	E201506492	692862	608228	8.96	8.96	8.64	5.0 - 12.0	Arcadis	12/15/2017	1257	6.44	0.7	2.20
MW-5	E201506493	692868	608118	9.45	9.45	9.14	5.0 - 10.0	Arcadis	12/15/2017	1259	6.21	1.1	2.93
MW-6	E201506494	692802	608167	8.33	8.33	7.93	5.0 - 10.0	Arcadis	12/15/2017	1304	5.96	0.2	1.97
MW-7	E201710557	693059	608380	11.30	11.30	10.88	5.0 - 15.0	Arcadis	12/15/2017	1240	8.57	26.3	2.31
MW-21S						16.86		Boswell	12/15/2017	1240	11.75		5.11
MW-20S						11.67		Boswell	12/15/2017	1225	9.24		2.43
MW-19S						7.12		Boswell	12/15/2017	1222	4.56		2.56
MW-18S						6.80		Boswell	12/15/2017	1220	4.27		2.53
MW-12S						12.51		Boswell	12/15/2017	--	--	--	--
MW-11S						19.74		Boswell	12/15/2017	1230	8.39		11.35
MW-10						23.40		Boswell	12/15/2017	1235	21.56		1.84
MW-7S						18.11		Boswell	12/15/2017	1300	11.13		6.98
MW-6S						22.95		Boswell	12/15/2017	1255	16.00		6.95
MW-9SR	E201209313	692428.1	607804.6	11.5		11.57	2.7 - 12.7	Sadat Associates	12/15/2017	1336	9.34	NA	2.23
MW-8DR3	E201308743	693141.6	606252.8	18		18.77	36.0 - 46.0	Sadat Associates	12/15/2017	1306	16.86	NA	1.91
MW-8SR2	E201307823	693134.0	606250.5	18		19.44	10.0 - 20.0	Sadat Associates	12/15/2017	1311	12.81	NA	6.63
MW-5SR	E201003194	693602.5	606101.2	27.5		31.31	18.5 - 28.5	Sadat Associates	12/15/2017	NA	NA	NA	NA
MW-4D	26-15308-4	693431.7	605801.5	34.5		36.66	50.6 - 60.5	Sadat Associates	12/15/2017	1253	36.59	NA	0.07
MW-4S	26-15307-6	693414.6	605815.0	35.5		38.06	29.4 - 39.3	Sadat Associates	12/15/2017	NA	NA	NA	NA
MW-1DR	E201209312	692060.1	607469.7	17.8		19.74	22.8 - 32.8	Sadat Associates	12/15/2017	1331	17	NA	2.74
MW-1SR	E201209018	692049.7	607461.4	17.75		20	7.5 - 17.5	Sadat Associates	12/15/2017	1327	17.62	NA	2.38

Notes:
Survey performed by: Keller & Kirkpatrick, Inc. in August 2015 for MW-1 through MW-6 and in October 2017 for MW-7.
Horizontal Datum: NJ State Place Coordinates System NAD83.
Vertical Datum: NAVD 88
Ft. MSL - Feet Mean Sea Level
TOC: Top of Casing
All Arcadis monitoring well are flush mount wells with 2-inch PVC inner casing.

Table B1 - Summary of Monitoring Well Locations DTW

PLUME MONITORING WELLS	(1) NJ State Plane Coordinates (NAD 83)		(1) Well Permit No.	(1) Well Elevation	(2) Depth to Water from Top of Inner Casing (ft)			
	East (X)	North (Y)			1Q17	2Q17	3Q17	4Q17
Shallow								
MW-1SR	607461.4	692049.7	E201209018	20	16.31	17.18	17.18	17.39
MW-4S	605815.0	693414.6	26-15307-6	38.06	32.18	DRY	32.71	32.20
MW-5SR	606101.2	693602.5	E201003194	31.31	27.30	DRY	33.58	31.77
MW-8SR2	606250.5	693134.0	E201307823	19.44	12.09	12.09	12.93	12.82
MW-9SR	607804.6	692428.1	E201209313	11.57	9.14	8.95	7.10	8.90
Deep								
MW-1DR	607469.7	692060.1	E201209312	19.74	16.78	16.62	16.77	19.80
MW-4D	605801.5	693431.7	26-15308-4	36.66	34.69	32.38	34.74	33.71
MW-8DR3	606252.8	693141.6	E201308743	18.77	16.98	16.39	16.31	16.75

Notes:

(1) Information obtained from *Monitoring Well Certification Form B - Location Certifications, dated 1/9/15. Certified by Marc J. Cifone, Land Surveyor (License # GS 41329). C*opies of the Form Bs are included as Appendix E.

(2) Data obtained from SGS Laboratories (Dayton, NJ) Field Work Sheets. Field Data Sheets for each quarter are included in the associated Laboratory Report (Appendix F)

Table Updated Notes & Qualifiers

U: Indicates the compound was analyzed for but was not detected above the MDL (method detection limit).

J: Indicates an estimated value. This flag is used when the mass spectral data indicates the presence of a compound that met the identification criteria; however, the results was more than the method detection limit but less than the reporting limit.

B: Indicates analyte found in associated method blank

N: Indicated presumptive evidence of a compound

E: Indicated value exceeds calibration range

ND: Not detected

RL: Reporting Limit

MDL: Method Detection Limit

Bolded and shaded items indicate the compound concentration exceeds the applicable standard

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-1SR					MW-1DR					
													DUPLICATE
Lab Sample ID:			JC39631-1	JC39631-1R	JC45784-1	JC51803-2	JC57765-2	JC39631-2	JC39631-2R	JC45784-2	JC51803-1	JC57765-1	JC57765-7
Date Sampled:			3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
GC/MS Volatiles (SW846 8260C)													
Acetone	ug/l	6000	ND (5.0)	-	8.7 J	ND (5.0)	ND (5.0)	ND (5.0)	-	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Benzene	ug/l	1	**3**	-	**3.5**	**3.9**	**3**	ND (0.14)	-	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)
Bromochloromethane	ug/l	-	ND (0.46)	-	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.46)	-	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)
Bromodichloromethane	ug/l	1	ND (0.55)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.55)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)
Bromoform	ug/l	4	ND (0.34)	-	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.34)	-	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)
Bromomethane	ug/l	10	ND (0.46)	-	ND (1.4)	ND (1.4) [b]	ND (1.4)	ND (0.46)	-	ND (1.4)	ND (1.4) [b]	ND (1.4)	ND (1.4)
2-Butanone (MEK)	ug/l	300	ND (1.9)	-	ND (4.8)	ND (4.8)	ND (4.8)	ND (1.9)	-	ND (4.8)	ND (4.8)	ND (4.8)	ND (4.8)
Carbon disulfide	ug/l	700	ND (0.33)	-	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.33)	-	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.50)
Carbon tetrachloride	ug/l	1	ND (0.54)	-	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.54)	-	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)
Chlorobenzene	ug/l	50	2.3	-	2.2	3.2	2.9	ND (0.17)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)
Chloroethane	ug/l	5	ND (0.44)	-	ND (0.59)	ND (0.59) [b]	ND (0.59)	ND (0.44)	-	ND (0.59)	ND (0.59) [b]	ND (0.59)	ND (0.59)
Chloroform	ug/l	70	ND (0.23)	-	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.23)	-	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)
Chloromethane	ug/l	-	ND (0.96)	-	ND (0.53)	ND (0.53) [b]	ND (0.53)	ND (0.96)	-	ND (0.53)	ND (0.53) [b]	ND (0.53)	ND (0.53)
Cyclohexane	ug/l	-	ND (0.73)	-	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.73)	-	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)
1,2-Dibromo-3-chloropropane	ug/l	0.02	ND (0.69)	-	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	-	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)
Dibromochloromethane	ug/l	1	ND (0.23)	-	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.23)	-	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)
1,2-Dibromoethane	ug/l	0.03	ND (0.22)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.22)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
1,2-Dichlorobenzene	ug/l	600	ND (0.23)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.23)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,3-Dichlorobenzene	ug/l	600	ND (0.19)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.19)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,4-Dichlorobenzene	ug/l	75	0.75 J	-	0.86 J	0.82 J	0.83 J	ND (0.21)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
Dichlorodifluoromethane	ug/l	1000	ND (0.70)	-	ND (1.9)	ND (1.9)	ND (1.9) [b]	ND (0.70)	-	ND (1.9)	ND (1.9)	ND (1.9) [b]	ND (1.9) [b]
1,1-Dichloroethane	ug/l	50	ND (0.21)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
1,2-Dichloroethane	ug/l	2	ND (0.39)	-	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.39)	-	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
1,1-Dichloroethene	ug/l	1	ND (0.20)	-	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.20)	-	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)
cis-1,2-Dichloroethene	ug/l	70	ND (0.31)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.31)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
trans-1,2-Dichloroethene	ug/l	100	ND (0.36)	-	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.36)	-	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
1,2-Dichloropropane	ug/l	1	ND (0.33)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.33)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)
cis-1,3-Dichloropropene	ug/l	-	ND (0.19)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.19)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
trans-1,3-Dichloropropene	ug/l	-	ND (0.26)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.26)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)
Ethylbenzene	ug/l	700	ND (0.20)	-	0.79 J	0.24 J	ND (0.22)	ND (0.20)	-	0.30 J	ND (0.22)	ND (0.22)	ND (0.22)
Freon 113	ug/l	20000	ND (1.2)	-	ND (1.2)	ND (1.2)	ND (1.2) [b]	ND (1.2) [a]	-	ND (1.2)	ND (1.2)	ND (1.2) [b]	ND (1.2) [b]
2-Hexanone	ug/l	300	ND (1.5)	-	ND (3.3)	ND (3.3)	ND (3.3)	ND (1.5)	-	ND (3.3)	ND (3.3)	ND (3.3)	ND (3.3)
Isopropylbenzene	ug/l	700	1	-	0.84 J	1.8	2.1	ND (0.16)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
Methyl Acetate	ug/l	7000	ND (1.5)	-	ND (3.1)	ND (3.1)	ND (3.1)	ND (1.5)	-	ND (3.1)	ND (3.1)	ND (3.1)	ND (3.1)
Methylcyclohexane	ug/l	-	ND (0.78)	-	ND (1.8)	ND (1.8)	ND (1.8)	ND (0.78)	-	ND (1.8)	ND (1.8)	ND (1.8)	ND (1.8)
Methyl Tert Butyl Ether	ug/l	70	ND (0.34)	-	0.27 J	0.25 J	0.27 J	0.49 J	-	0.51 J	0.74 J	0.78 J	0.83 J
4-Methyl-2-pentanone(MIBK)	ug/l	-	ND (1.2)	-	ND (3.0)	ND (3.0)	ND (3.0)	ND (1.2)	-	ND (3.0)	ND (3.0)	ND (3.0)	ND (3.0)
Methylene chloride	ug/l	3	ND (1.0)	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-1SR					MW-1DR					
													DUPLICATE
Lab Sample ID:			JC39631-1	JC39631-1R	JC45784-1	JC51803-2	JC57765-2	JC39631-2	JC39631-2R	JC45784-2	JC51803-1	JC57765-1	JC57765-7
Date Sampled:			3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Styrene	ug/l	100	ND (0.27)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.27)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)
1,1,2,2-Tetrachloroethane	ug/l	1	ND (0.39)	-	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.39)	-	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)
Tetrachloroethene	ug/l	1	ND (0.23)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.23)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
Toluene	ug/l	600	ND (0.23)	-	4.5	0.33 J	0.34 J	ND (0.23)	-	1.6	ND (0.25)	ND (0.25)	ND (0.25)
1,2,3-Trichlorobenzene	ug/l	-	ND (0.50)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,2,4-Trichlorobenzene	ug/l	9	ND (0.50)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,1,1-Trichloroethane	ug/l	30	ND (0.22)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.22)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
1,1,2-Trichloroethane	ug/l	3	ND (0.28)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.28)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)
Trichloroethene	ug/l	1	ND (0.26)	-	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.26)	-	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)
Trichlorofluoromethane	ug/l	2000	ND (0.58)	-	ND (0.60)	ND (0.60)	ND (0.60) [b]	ND (0.58)	-	ND (0.60)	ND (0.60)	ND (0.60) [b]	ND (0.60) [b]
Vinyl chloride	ug/l	1	ND (0.33)	-	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.33)	-	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)
m,p-Xylene	ug/l	-	0.73 J	-	1.8	2.2	2.2	ND (0.42)	-	0.54 J	ND (0.43)	ND (0.43)	ND (0.43)
o-Xylene	ug/l	-	0.40 J	-	0.73 J	0.77 J	0.75 J	ND (0.21)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)
Xylene (total)	ug/l	1000	1.1	-	2.5	3	2.9	ND (0.21)	-	0.54 J	ND (0.22)	ND (0.22)	ND (0.22)
GC/MS Volatile TIC													
Total TIC, Volatile	ug/l	-	0	-	0	0	11.1 J	0	-	0	0	0	0
Total Alkanes	ug/l	-	0	-	0	0	0	0	-	0	0	0	0
GC/MS Semi-volatiles (SW846 8270D)													
2-Chlorophenol	ug/l	40	ND (0.88)	-	ND (0.82)	ND (0.82)	ND (0.85)	ND (0.87)	-	ND (0.82)	ND (0.82)	ND (0.85)	ND (0.82)
4-Chloro-3-methyl phenol	ug/l	100	ND (0.96)	-	ND (0.89)	ND (0.89)	ND (0.92)	ND (0.95)	-	ND (0.89)	ND (0.89)	ND (0.92)	ND (0.89)
2,4-Dichlorophenol	ug/l	20	ND (1.4)	-	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.4)	-	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)
2,4-Dimethylphenol	ug/l	100	ND (2.6)	-	ND (2.4)	ND (2.4)	ND (2.5)	ND (2.6)	-	ND (2.4)	ND (2.4)	ND (2.5)	ND (2.4)
2,4-Dinitrophenol	ug/l	40	ND (1.7)	-	ND (1.6)	ND (1.6) [b]	ND (1.6) [b]	ND (1.6)	-	ND (1.6)	ND (1.6) [b]	ND (1.6) [b]	ND (1.6) [b]
2-Methylphenol	ug/l	50	ND (0.95)	-	ND (0.89)	ND (0.89)	ND (0.92)	ND (0.94)	-	ND (0.89)	ND (0.89)	ND (0.92)	ND (0.89)
3&4-Methylphenol	ug/l	50	ND (0.95)	-	ND (0.88)	ND (0.88)	ND (0.91)	ND (0.94)	-	ND (0.88)	ND (0.88)	ND (0.91)	ND (0.88)
2-Nitrophenol	ug/l	-	ND (1.0)	-	ND (0.96)	ND (0.96)	ND (0.99) [b]	ND (1.0)	-	ND (0.96)	ND (0.96)	ND (0.99) [b]	ND (0.96) [b]
4-Nitrophenol	ug/l	-	ND (1.2)	-	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	-	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
Phenol	ug/l	2000	ND (0.42)	-	ND (0.39)	ND (0.39)	ND (0.40)	ND (0.42)	-	ND (0.39)	ND (0.39)	ND (0.40)	ND (0.39)
2,3,4,6-Tetrachlorophenol	ug/l	200	ND (1.6)	-	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.6)	-	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)
2,4,5-Trichlorophenol	ug/l	700	ND (1.4)	-	ND (1.3)	ND (1.3)	ND (1.4)	ND (1.4)	-	ND (1.3)	ND (1.3)	ND (1.4)	ND (1.3)
2,4,6-Trichlorophenol	ug/l	20	ND (0.99)	-	ND (0.92)	ND (0.92)	ND (0.95)	ND (0.98)	-	ND (0.92)	ND (0.92)	ND (0.95)	ND (0.92)
Acenaphthene	ug/l	400	0.79 J	-	0.85 J	0.56 J	0.82 J	ND (0.20)	-	ND (0.19)	ND (0.19)	ND (0.20)	ND (0.19)
Acenaphthylene	ug/l	100	ND (0.15)	-	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	-	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)
Acetophenone	ug/l	700	ND (0.22)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.22)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
Anthracene	ug/l	2000	ND (0.23)	-	ND (0.21)	ND (0.21)	0.69 J	ND (0.22)	-	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.21)
Atrazine	ug/l	3	ND (0.48)	-	ND (0.45)	ND (0.45)	ND (0.46) [b]	ND (0.48)	-	ND (0.45)	ND (0.45)	ND (0.46) [b]	ND (0.45) [b]

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-1SR					MW-1DR					
													DUPLICATE
Lab Sample ID:			JC39631-1	JC39631-1R	JC45784-1	JC51803-2	JC57765-2	JC39631-2	JC39631-2R	JC45784-2	JC51803-1	JC57765-1	JC57765-7
Date Sampled:			3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Benzaldehyde	ug/l	-	ND (0.31)	-	ND (0.29)	ND (0.29) [d]	ND (0.30)	ND (0.31)	-	ND (0.29)	ND (0.29) [d]	ND (0.30)	ND (0.29)
Benzo(g,h,i)perylene	ug/l	100	ND (0.37)	-	ND (0.34)	ND (0.34)	0.73 J	ND (0.36)	-	ND (0.34)	ND (0.34)	ND (0.35)	ND (0.34)
4-Bromophenyl phenyl ether	ug/l	-	ND (0.43)	-	ND (0.40)	ND (0.40)	ND (0.42)	ND (0.43)	-	ND (0.40)	ND (0.40)	ND (0.42)	ND (0.40)
Butyl benzyl phthalate	ug/l	100	ND (0.49)	-	ND (0.46)	ND (0.46) [b]	ND (0.47)	ND (0.49)	-	ND (0.46)	ND (0.46) [b]	ND (0.47)	ND (0.46)
1,1'-Biphenyl	ug/l	400	ND (0.23)	-	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.23)	-	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.21)
2-Chloronaphthalene	ug/l	600	ND (0.25)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.25)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)
4-Chloroaniline	ug/l	30	ND (0.37)	-	ND (0.34)	ND (0.34)	ND (0.35)	ND (0.36)	-	ND (0.34)	ND (0.34)	ND (0.35)	ND (0.34)
Carbazole	ug/l	-	ND (0.25)	-	ND (0.23)	ND (0.23)	ND (0.24)	ND (0.24)	-	ND (0.23)	ND (0.23)	ND (0.24)	ND (0.23)
Caprolactam	ug/l	5000	ND (0.70)	-	ND (0.65)	ND (0.65) [b]	ND (0.67)	ND (0.69)	-	ND (0.65)	ND (0.65) [b]	ND (0.67)	ND (0.65)
Chrysene	ug/l	5	ND (0.19)	-	ND (0.18)	ND (0.18)	1.2	ND (0.19)	-	ND (0.18)	ND (0.18)	0.19 J	ND (0.18)
bis(2-Chloroethoxy)methane	ug/l	-	ND (0.30)	-	ND (0.28)	ND (0.28)	ND (0.29)	ND (0.30)	-	ND (0.28)	ND (0.28)	ND (0.29)	ND (0.28)
bis(2-Chloroethyl)ether	ug/l	7	ND (0.27)	-	ND (0.25)	0.88 J	ND (0.26)	1.3 J	-	ND (0.25)	1.2 J	1.8 J	2.3
bis(2-Chloroisopropyl)ether	ug/l	300	ND (0.43)	-	ND (0.40)	ND (0.40)	ND (0.42)	ND (0.43)	-	ND (0.40)	ND (0.40)	ND (0.42)	ND (0.40)
4-Chlorophenyl phenyl ether	ug/l	-	ND (0.39)	-	ND (0.37)	ND (0.37)	ND (0.38)	ND (0.39)	-	ND (0.37)	ND (0.37)	ND (0.38)	ND (0.37)
2,4-Dinitrotoluene	ug/l	-	ND (0.59)	-	ND (0.55)	ND (0.55)	ND (0.57)	ND (0.59)	-	ND (0.55)	ND (0.55)	ND (0.57)	ND (0.55)
2,6-Dinitrotoluene	ug/l	-	ND (0.51)	-	ND (0.48)	ND (0.48)	ND (0.49)	ND (0.51)	-	ND (0.48)	ND (0.48)	ND (0.49)	ND (0.48)
3,3'-Dichlorobenzidine	ug/l	30	ND (0.55)	-	ND (0.51)	ND (0.51)	ND (0.52)	ND (0.54)	-	ND (0.51)	ND (0.51)	ND (0.52)	ND (0.51)
1,4-Dioxane	ug/l	0.4	**24.6**	-	**7.7**	**11.7**	**13.6**	**87.4**	-	**77**	**116**	**76.2**	**74.1**
Dibenzofuran	ug/l	-	ND (0.24)	-	ND (0.22)	ND (0.22)	ND (0.23)	ND (0.23)	-	ND (0.22)	ND (0.22)	ND (0.23)	ND (0.22)
Di-n-butyl phthalate	ug/l	700	ND (0.53)	-	ND (0.50) [a]	ND (0.50)	ND (0.51)	ND (0.53)	-	ND (0.50) [a]	ND (0.50)	ND (0.51)	ND (0.50)
Di-n-octyl phthalate	ug/l	100	ND (0.25)	-	ND (0.23)	ND (0.23)	ND (0.24) [b]	ND (0.25)	-	ND (0.23)	ND (0.23)	ND (0.24) [b]	ND (0.23) [b]
Diethyl phthalate	ug/l	6000	ND (0.28)	-	ND (0.26)	ND (0.26)	ND (0.27)	ND (0.28)	-	ND (0.26)	ND (0.26)	ND (0.27)	ND (0.26)
Dimethyl phthalate	ug/l	100	ND (0.23)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.23)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)
bis(2-Ethylhexyl)phthalate	ug/l	3	1.8 J	-	ND (1.7)	ND (1.7)	**3.6**	ND (1.8)	-	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)
Fluoranthene	ug/l	300	ND (0.18)	-	0.64 J	ND (0.17)	2.8	ND (0.18)	-	ND (0.17)	ND (0.17)	0.40 J	ND (0.17)
Fluorene	ug/l	300	0.58 J	-	0.49 J	ND (0.17)	0.67 J	ND (0.18)	-	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.17)
Hexachlorocyclopentadiene	ug/l	40	ND (3.0)	-	ND (2.8)	ND (2.8)	ND (2.9)	ND (3.0)	-	ND (2.8)	ND (2.8)	ND (2.9)	ND (2.8)
Hexachloroethane	ug/l	7	ND (0.42)	-	ND (0.39)	ND (0.39)	ND (0.40)	ND (0.41)	-	ND (0.39)	ND (0.39)	ND (0.40)	ND (0.39)
Isophorone	ug/l	40	ND (0.30)	-	ND (0.28)	ND (0.28)	ND (0.29)	ND (0.29)	-	ND (0.28)	ND (0.28)	ND (0.29)	ND (0.28)
2-Methylnaphthalene	ug/l	30	ND (0.23)	-	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	-	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.21)
2-Nitroaniline	ug/l	-	ND (0.30)	-	ND (0.28)	ND (0.28) [b]	ND (0.29)	ND (0.29)	-	ND (0.28)	ND (0.28) [b]	ND (0.29)	ND (0.28)
3-Nitroaniline	ug/l	-	ND (0.42)	-	ND (0.39)	ND (0.39)	ND (0.40)	ND (0.41)	-	ND (0.39)	ND (0.39)	ND (0.40)	ND (0.39)
4-Nitroaniline	ug/l	-	ND (0.47)	-	ND (0.44)	ND (0.44)	ND (0.45)	ND (0.47)	-	ND (0.44)	ND (0.44)	ND (0.45)	ND (0.44)
Naphthalene	ug/l	300	ND (0.25)	-	ND (0.23)	0.45 J	0.57 JB	ND (0.25)	-	ND (0.23)	ND (0.23)	ND (0.24)	ND (0.23)
Nitrobenzene	ug/l	6	ND (0.69)	-	ND (0.64)	ND (0.64)	ND (0.66)	ND (0.68)	-	ND (0.64)	ND (0.64)	ND (0.66)	ND (0.64)
N-Nitroso-di-n-propylamine	ug/l	10	ND (0.52)	-	ND (0.48)	ND (0.48)	ND (0.50)	ND (0.51)	-	ND (0.48)	ND (0.48)	ND (0.50)	ND (0.48)
N-Nitrosodiphenylamine	ug/l	10	ND (0.24)	-	ND (0.22)	0.65 J	ND (0.23)	ND (0.24)	-	ND (0.22)	ND (0.22)	ND (0.23)	ND (0.22)
Phenanthrene	ug/l	-	ND (0.19)	-	ND (0.18)	ND (0.18)	1.7	ND (0.19)	-	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)
Pyrene	ug/l	200	ND (0.24)	-	0.48 J	ND (0.22)	2.2	ND (0.23)	-	ND (0.22)	ND (0.22)	0.34 J	ND (0.22)
1,2,4,5-Tetrachlorobenzene	ug/l	-	ND (0.40)	-	ND (0.37)	ND (0.37)	ND (0.38)	ND (0.39)	-	ND (0.37)	ND (0.37)	ND (0.38)	ND (0.37)

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-1SR					MW-1DR					
													DUPLICATE
Lab Sample ID:			JC39631-1	JC39631-1R	JC45784-1	JC51803-2	JC57765-2	JC39631-2	JC39631-2R	JC45784-2	JC51803-1	JC57765-1	JC57765-7
Date Sampled:			3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
GC/MS Semi-volatiles (SW846 8270D BY SIM)													
4,6-Dinitro-o-cresol	ug/l	1	ND (0.16)	-	ND (0.15)	ND (0.15)	ND (0.16) [b]	ND (0.16)	-	ND (0.15)	ND (0.15)	ND (0.16) [b]	ND (0.16) [b]
Pentachlorophenol	ug/l	0.3	ND (0.14)	-	ND (0.13)	ND (0.13)	ND (0.13) [b]	ND (0.14)	-	ND (0.13)	ND (0.13)	ND (0.13) [b]	ND (0.13) [b]
Benzo(a)anthracene	ug/l	0.1	**0.231**	-	**0.414**	ND (0.023)	**1.49** [a]	ND (0.024)	-	ND (0.023)	ND (0.023)	**0.293** [a]	ND (0.023) [a]
Benzo(a)pyrene	ug/l	0.1	ND (0.036)	-	**0.241**	0.0672	**0.772**	ND (0.035)	-	ND (0.033)	ND (0.033)	ND (0.034)	ND (0.034)
Benzo(b)fluoranthene	ug/l	0.2	ND (0.047)	-	**0.228**	ND (0.043)	**1.17**	ND (0.046)	-	ND (0.043)	ND (0.043)	0.143	ND (0.044)
Benzo(k)fluoranthene	ug/l	0.5	ND (0.036)	-	0.141	ND (0.033)	0.376	ND (0.035)	-	ND (0.033)	ND (0.033)	0.0527 J	ND (0.034)
Dibenzo(a,h)anthracene	ug/l	0.3	ND (0.039)	-	ND (0.036)	ND (0.036)	0.125	ND (0.039)	-	ND (0.036)	ND (0.036)	ND (0.037)	ND (0.037)
Hexachlorobenzene	ug/l	0.02	ND (0.012)	-	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.012)	-	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)
Hexachlorobutadiene	ug/l	1	ND (0.019)	-	ND (0.018)	ND (0.018)	ND (0.018)	ND (0.019)	-	ND (0.018)	ND (0.018)	ND (0.018)	ND (0.018)
Indeno(1,2,3-cd)pyrene	ug/l	0.2	ND (0.041)	-	0.124	ND (0.038)	**0.736**	ND (0.040)	-	ND (0.038)	ND (0.038)	ND (0.039)	ND (0.039)
1,4-Dioxane	ug/l	0.4	-	-	-	-	-	-	-	-	-	-	-
GC/MS Semi-volatile TIC													
Total TIC, Semi-Volatile	ug/l	-	1208.6 J	-	793.2 J	777.2 J	672 J	27 J	-	18.1 J	31.4 J	31 J	17.2 J
Total Alkanes	ug/l	-	0	-	0	0	0	0	-	0	0	0	0
GC Semi-volatiles (SW846 8081B)													
Aldrin	ug/l	0.04	ND (0.0062)	-	ND (0.0040)	ND (0.0052)	ND (0.0026)	ND (0.0066)	-	ND (0.0040)	ND (0.0052)	ND (0.0028)	ND (0.0028)
alpha-BHC	ug/l	0.02	ND (0.0061)	-	ND (0.0040)	ND (0.0052)	ND (0.0026)	ND (0.0065)	-	ND (0.0040)	ND (0.0052)	ND (0.0028)	ND (0.0028)
beta-BHC	ug/l	0.04	ND (0.0058)	-	ND (0.0038)	ND (0.0080)	ND (0.0040)	ND (0.0062)	-	ND (0.0038)	ND (0.0080)	ND (0.0043)	ND (0.0043)
delta-BHC	ug/l	-	ND (0.0047)	-	ND (0.0030)	ND (0.0066)	ND (0.0033)	ND (0.0050)	-	ND (0.0030)	ND (0.0066)	ND (0.0036)	ND (0.0035)
gamma-BHC (Lindane)	ug/l	0.03	ND (0.0028)	-	ND (0.0019)	ND (0.0060)	ND (0.0030)	ND (0.0030)	-	ND (0.0019)	ND (0.0060)	ND (0.0033)	ND (0.0032)
alpha-Chlordane	ug/l	0.5	ND (0.0047)	-	ND (0.0031)	ND (0.0049)	ND (0.0025)	ND (0.0050)	-	ND (0.0031)	ND (0.0049)	ND (0.0027)	ND (0.0026)
gamma-Chlordane	ug/l	0.5	ND (0.0047)	-	0.0065 J [b]	ND (0.0043)	ND (0.0022)	ND (0.0050)	-	ND (0.0031)	ND (0.0043)	ND (0.0023)	ND (0.0023)
Chlordane (alpha and gamma)	ug/l	0.5	ND (0.0047)	-	0.0065 J	ND (0.0043)	ND (0.0022)	ND (0.0050)	-	ND (0.0031)	ND (0.0043)	ND (0.0023)	ND (0.0023)
Dieldrin	ug/l	0.03	ND (0.0037)	-	ND (0.0024)	ND (0.0077)	ND (0.0039)	ND (0.0039)	-	ND (0.0024)	ND (0.0077)	ND (0.0042)	ND (0.0041)
4,4'-DDD	ug/l	0.1	ND (0.0039)	-	0.014	ND (0.0057)	ND (0.0029)	ND (0.0041)	-	ND (0.0025)	ND (0.0057)	ND (0.0031)	ND (0.0031)
4,4'-DDE	ug/l	0.1	ND (0.0063)	-	0.0067 [b]	ND (0.0051)	ND (0.0026)	ND (0.0067)	-	ND (0.0041)	ND (0.0051)	ND (0.0027)	ND (0.0027)
4,4'-DDT	ug/l	0.1	ND (0.0051)	-	0.0082	ND (0.0069)	ND (0.0035)	ND (0.0054)	-	ND (0.0033)	ND (0.0069)	ND (0.0037)	ND (0.0036)
Endrin	ug/l	2	ND (0.0051)	-	ND (0.0034)	ND (0.0061)	ND (0.0031)	ND (0.0055)	-	ND (0.0034)	ND (0.0061)	ND (0.0033)	ND (0.0032)
Endosulfan sulfate	ug/l	40	ND (0.0054)	-	ND (0.0035)	ND (0.0055)	ND (0.0028)	ND (0.0057)	-	ND (0.0035)	ND (0.0055)	ND (0.0030)	ND (0.0029)
Endrin aldehyde	ug/l	-	ND (0.0052)	-	0.03	ND (0.0067)	ND (0.0034)	ND (0.0056)	-	ND (0.0034)	ND (0.0067)	ND (0.0036)	ND (0.0036)
Endrin ketone	ug/l	-	ND (0.0052)	-	ND (0.0034)	ND (0.0062)	ND (0.0031)	ND (0.0055)	-	ND (0.0034)	ND (0.0062)	ND (0.0034)	ND (0.0033)
Endosulfan-I	ug/l	40	ND (0.0051)	-	ND (0.0033)	ND (0.0053)	ND (0.0027)	ND (0.0054)	-	ND (0.0033)	ND (0.0053)	ND (0.0029)	ND (0.0028)
Endosulfan-II	ug/l	40	ND (0.0044)	-	ND (0.0029)	ND (0.0049)	ND (0.0025)	ND (0.0047)	-	ND (0.0029)	ND (0.0049)	ND (0.0027)	ND (0.0026)
Heptachlor	ug/l	0.05	ND (0.0039)	-	ND (0.0025)	ND (0.0045)	ND (0.0023)	ND (0.0041)	-	ND (0.0025)	ND (0.0045)	ND (0.0024)	ND (0.0024)

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-1SR					MW-1DR					
													DUPLICATE
Lab Sample ID:			JC39631-1	JC39631-1R	JC45784-1	JC51803-2	JC57765-2	JC39631-2	JC39631-2R	JC45784-2	JC51803-1	JC57765-1	JC57765-7
Date Sampled:			3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Heptachlor epoxide	ug/l	0.2	ND (0.0067)	-	ND (0.0044)	ND (0.0060)	ND (0.0030)	ND (0.0071)	-	ND (0.0044)	ND (0.0060)	ND (0.0033)	ND (0.0032)
Methoxychlor	ug/l	40	ND (0.0058)	-	ND (0.0038)	ND (0.0067)	ND (0.0034)	ND (0.0062)	-	ND (0.0038)	ND (0.0067)	ND (0.0036)	ND (0.0036)
Toxaphene	ug/l	2	ND (0.19)	-	ND (0.12)	ND (0.16)	ND (0.080)	ND (0.20)	-	ND (0.12)	ND (0.16)	ND (0.086)	ND (0.085)
GC Semi-volatiles (SW846 8082A)													
Aroclor 1016	ug/l	0.5	ND (0.15)	-	ND (0.21)	ND (0.20)	ND (0.099)	ND (0.16)	-	ND (0.21)	ND (0.20)	ND (0.11)	ND (0.098)
Aroclor 1221	ug/l	0.5	ND (0.31)	-	ND (0.32)	ND (0.42)	ND (0.21)	ND (0.33)	-	ND (0.32)	ND (0.42)	ND (0.23)	ND (0.21)
Aroclor 1232	ug/l	0.5	ND (0.20)	-	ND (0.16)	ND (0.26)	ND (0.13)	ND (0.22)	-	ND (0.16)	ND (0.26)	ND (0.14)	ND (0.13)
Aroclor 1242	ug/l	0.5	ND (0.28)	-	ND (0.24)	ND (0.23)	ND (0.12)	ND (0.30)	-	ND (0.24)	ND (0.23)	ND (0.12)	ND (0.11)
Aroclor 1248	ug/l	0.5	ND (0.43)	-	ND (0.15)	ND (0.13)	**0.79 [d]**	ND (0.46)	-	ND (0.15)	ND (0.13)	ND (0.068)	ND (0.063)
Aroclor 1254	ug/l	0.5	ND (0.25)	-	ND (0.17)	ND (0.41)	0.40 [d]	ND (0.26)	-	ND (0.17)	ND (0.41)	ND (0.22)	ND (0.21)
Aroclor 1260	ug/l	0.5	ND (0.41)	-	ND (0.14)	ND (0.15)	ND (0.077)	ND (0.44)	-	ND (0.14)	ND (0.15)	ND (0.083)	ND (0.076)
Aroclor 1268	ug/l	-	ND (0.18)	-	ND (0.16)	ND (0.17)	ND (0.087)	ND (0.19)	-	ND (0.16)	ND (0.17)	ND (0.094)	ND (0.087)
Aroclor 1262	ug/l	-	ND (0.20)	-	ND (0.15)	ND (0.19)	ND (0.097)	ND (0.21)	-	ND (0.15)	ND (0.19)	ND (0.10)	ND (0.097)
Metals Analysis													
Aluminum	ug/l	200	21 U	-	**308**	55.4 B	**753**	21 U	-	33 U	**734**	**1200**	**239**
Antimony	ug/l	6	3.3 U	-	4.3 U	4.3 U	4.3 U	3.3 U	-	4.3 U	4.3 U	4.3 U	4.3 U
Arsenic	ug/l	3	**4.2**	-	**5.1**	**3.1**	**5.8**	**56.7**	-	**18.3**	**54.5**	**39.6**	**30**
Barium	ug/l	6000	876	-	735	805	740	722	-	725	789	695	649
Beryllium	ug/l	1	0.25 U	-	0.40 U	0.40 U	0.40 U	0.25 U	-	0.40 U	0.40 U	0.40 U	0.40 U
Cadmium	ug/l	4	0.50 B	0.40 U	0.70 U	0.70 U	1.7 B	0.70 B	0.40 U	0.70 U	0.70 U	0.70 U	0.70 U
Calcium	ug/l	-	182000	-	240000	234000	200000	59900	-	64200	64400	68100	71100
Chromium	ug/l	70	4.6 B	-	9.9 B	5.8 B	17.6	0.90 B	-	0.85 U	2.8 B	18.6	5.6 B
Cobalt	ug/l	100	2.0 B	-	2.0 B	2.6 B	2.9 B	0.69 U	-	0.72 U	1.1 B	1.3 B	0.72 U
Copper	ug/l	1300	12.2	-	10.1	5.8 B	28.5	6.3 B	-	3.2 U	5.0 B	12.2	3.4 B
Iron	ug/l	300	**12300**	-	**6940**	**12700**	**17300**	**7960**	-	**2400**	**9290**	**9040**	**6350**
Lead	ug/l	5	2.3 U	-	**38.1**	**9.5**	**77.3**	2.3 U	-	2.6 U	2.7 B	**8.9**	2.6 U
Magnesium	ug/l	-	49400	-	40400	41900	40100	20600	-	22100	23000	22600	22100
Manganese	ug/l	50	**260**	-	**324**	**381**	**309**	**161**	-	**99**	**173**	**189**	**167**
Mercury	ug/l	2	0.14 U [b]	-	0.088 B	0.083 U	0.091 B	0.047 U	-	0.083 U	0.083 U	0.083 U	0.083 U
Nickel	ug/l	100	6.7 B	-	7.3 B	8.1 B	12.2	0.76 U	-	1.3 U	2.1 B	9.9 B	2.9 B
Potassium	ug/l	-	71100	-	75100	77100	70700	14900	-	16200	18100	14300	13300
Selenium	ug/l	40	4.1 U	-	8.9 B	6.6 U	6.6 U	4.1 U	-	6.6 U	6.6 U	6.6 U	6.6 U
Silver	ug/l	40	0.88 U	-	3.1 U	3.1 U	3.1 U	0.88 U	-	3.1 U	3.1 U	3.1 U	3.1 U
Sodium	ug/l	50000	**254000**	-	**261000**	**259000**	**250000**	**89300**	-	**91800**	**98200**	**83500**	**74500**
Thallium	ug/l	2	1.9 U	-	1.6 U	1.6 U	1.6 U	1.9 U	-	1.8 B	1.6 U	1.6 U	1.6 U
Vanadium	ug/l	-	1.9 B	-	4.1 B	2.6 B	5.1 B	0.66 U	-	1.3 U	1.6 B	3.6 B	1.3 U

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-1SR					MW-1DR					
													DUPLICATE
Lab Sample ID:			JC39631-1	JC39631-1R	JC45784-1	JC51803-2	JC57765-2	JC39631-2	JC39631-2R	JC45784-2	JC51803-1	JC57765-1	JC57765-7
Date Sampled:			3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	**Units**		**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
Zinc	ug/l	2000	6.6 B	-	37.2	11.8 B	89.5	2.3 B	-	4.0 U	5.7 B	19.0 B	4.0 U
General Chemistry													
Solids, Total Suspended	mg/l	-	33.3	-	37	36.7	63.9	20.2	-	6.7	43	99.3	29.6
Field Data													
Turbidity	NTU	-	<0.10 [e]	-	0	0	48	0.8 [e]	-	0.2	34.6	47	-
Depth To H2O, Top Casing	feet	-	16.31	-	17.18	17.18	17.39	16.78	-	16.62	16.77	19.8	-
Specific Conductivity (Field)	umhos/cm	-	2860 [e]	-	2710	2720	3310	1030 [e]	-	905	943	1210	-
pH (Field)	su	6.5-8.5	7.53 [e]	-	**5.72**	6.87	**6.37**	7.71 [e]	-	**5.81**	6.89	6.75	-
Oxygen, Dissolved (Field)	mg/l	-	0.590 [e]	-	1.67	0	0	7.57 [e]	-	0.66	0.015	0	-
Dry		-	-	-	-	-	-	-	-	-	-	-	-

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-4S					MW-4D					
Lab Sample ID:			JC39631-3	JC39743-2	JC45784-3	JC51803-4	JC57765-10	JC39631-4	JC39743-1	JC39743-1R	JC45784-4	JC51803-3	JC57765-3
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/27/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
GC/MS Volatiles (SW846 8260C)													
Acetone	ug/l	6000	-	-	-	-	-	-	16.7	-	24.1	24.0 [a]	29.5
Benzene	ug/l	1	-	-	-	-	-	-	0.43 J	-	0.55	0.41 J	0.89
Bromochloromethane	ug/l	-	-	-	-	-	-	-	ND (0.46)	-	ND (0.38)	ND (0.38)	ND (0.38)
Bromodichloromethane	ug/l	1	-	-	-	-	-	-	ND (0.55)	-	ND (0.22)	ND (0.22)	ND (0.22)
Bromoform	ug/l	4	-	-	-	-	-	-	ND (0.34)	-	ND (0.42)	ND (0.42)	ND (0.42)
Bromomethane	ug/l	10	-	-	-	-	-	-	ND (0.46)	-	ND (1.4)	ND (1.4)	ND (1.4)
2-Butanone (MEK)	ug/l	300	-	-	-	-	-	-	ND (1.9)	-	ND (4.8)	ND (4.8)	ND (4.8)
Carbon disulfide	ug/l	700	-	-	-	-	-	-	ND (0.33)	-	2.3	ND (0.23)	ND (0.50)
Carbon tetrachloride	ug/l	1	-	-	-	-	-	-	ND (0.54)	-	ND (0.34)	ND (0.34)	ND (0.34)
Chlorobenzene	ug/l	50	-	-	-	-	-	-	ND (0.17)	-	ND (0.24)	ND (0.24)	ND (0.24)
Chloroethane	ug/l	5	-	-	-	-	-	-	ND (0.44)	-	ND (0.59)	ND (0.59)	ND (0.59)
Chloroform	ug/l	70	-	-	-	-	-	-	ND (0.23)	-	ND (0.29)	ND (0.29)	ND (0.29)
Chloromethane	ug/l	-	-	-	-	-	-	-	ND (0.96)	-	ND (0.53)	ND (0.53)	ND (0.53)
Cyclohexane	ug/l	-	-	-	-	-	-	-	ND (0.73)	-	ND (0.63)	ND (0.63)	ND (0.63)
1,2-Dibromo-3-chloropropane	ug/l	0.02	-	-	-	-	-	-	ND (0.69)	-	ND (0.69)	ND (0.69)	ND (0.69)
Dibromochloromethane	ug/l	1	-	-	-	-	-	-	ND (0.23)	-	ND (0.16)	ND (0.16)	ND (0.16)
1,2-Dibromoethane	ug/l	0.03	-	-	-	-	-	-	ND (0.22)	-	ND (0.21)	ND (0.21)	ND (0.21)
1,2-Dichlorobenzene	ug/l	600	-	-	-	-	-	-	ND (0.23)	-	ND (0.50)	ND (0.50)	ND (0.50)
1,3-Dichlorobenzene	ug/l	600	-	-	-	-	-	-	ND (0.19)	-	ND (0.50)	ND (0.50)	ND (0.50)
1,4-Dichlorobenzene	ug/l	75	-	-	-	-	-	-	ND (0.21)	-	ND (0.50)	ND (0.50)	ND (0.50)
Dichlorodifluoromethane	ug/l	1000	-	-	-	-	-	-	ND (0.70)	-	ND (1.9)	ND (1.9) [c]	ND (1.9) [b]
1,1-Dichloroethane	ug/l	50	-	-	-	-	-	-	ND (0.21)	-	ND (0.21)	ND (0.21)	ND (0.21)
1,2-Dichloroethane	ug/l	2	-	-	-	-	-	-	ND (0.39)	-	ND (0.20)	ND (0.20)	ND (0.20)
1,1-Dichloroethene	ug/l	1	-	-	-	-	-	-	ND (0.20)	-	ND (0.47)	ND (0.47)	ND (0.47)
cis-1,2-Dichloroethene	ug/l	70	-	-	-	-	-	-	ND (0.31)	-	ND (0.50)	ND (0.50)	ND (0.50)
trans-1,2-Dichloroethene	ug/l	100	-	-	-	-	-	-	ND (0.36)	-	ND (0.40)	ND (0.40)	ND (0.40)
1,2-Dichloropropane	ug/l	1	-	-	-	-	-	-	ND (0.33)	-	ND (0.24)	ND (0.24)	ND (0.24)
cis-1,3-Dichloropropene	ug/l	-	-	-	-	-	-	-	ND (0.19)	-	ND (0.25)	ND (0.25)	ND (0.25)
trans-1,3-Dichloropropene	ug/l	-	-	-	-	-	-	-	ND (0.26)	-	ND (0.22)	ND (0.22)	ND (0.22)
Ethylbenzene	ug/l	700	-	-	-	-	-	-	ND (0.20)	-	ND (0.22)	ND (0.22)	ND (0.22)
Freon 113	ug/l	20000	-	-	-	-	-	-	ND (1.2) [a]	-	ND (1.2)	ND (1.2)	ND (1.2) [b]
2-Hexanone	ug/l	300	-	-	-	-	-	-	ND (1.5)	-	ND (3.3)	ND (3.3)	ND (3.3)
Isopropylbenzene	ug/l	700	-	-	-	-	-	-	0.66 J	-	0.67 J	0.60 J	0.79 J
Methyl Acetate	ug/l	7000	-	-	-	-	-	-	ND (1.5)	-	ND (3.1)	ND (3.1)	ND (3.1)
Methylcyclohexane	ug/l	-	-	-	-	-	-	-	ND (0.78)	-	ND (1.8)	ND (1.8)	ND (1.8)
Methyl Tert Butyl Ether	ug/l	70	-	-	-	-	-	-	ND (0.34)	-	ND (0.25)	ND (0.25)	ND (0.25)
4-Methyl-2-pentanone(MIBK)	ug/l	-	-	-	-	-	-	-	ND (1.2)	-	ND (3.0)	ND (3.0)	ND (3.0)
Methylene chloride	ug/l	3	-	-	-	-	-	-	ND (1.0)	-	ND (1.0)	ND (1.0)	ND (1.0)

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-4S					MW-4D					
Lab Sample ID:			JC39631-3	JC39743-2	JC45784-3	JC51803-4	JC57765-10	JC39631-4	JC39743-1	JC39743-1R	JC45784-4	JC51803-3	JC57765-3
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/27/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Styrene	ug/l	100	-	-	-	-	-	-	ND (0.27)	-	ND (0.24)	ND (0.24)	ND (0.24)
1,1,2,2-Tetrachloroethane	ug/l	1	-	-	-	-	-	-	ND (0.39)	-	ND (0.17)	ND (0.17)	ND (0.17)
Tetrachloroethene	ug/l	1	-	-	-	-	-	-	ND (0.23)	-	ND (0.50)	ND (0.50)	ND (0.50)
Toluene	ug/l	600	-	-	-	-	-	-	13.5	-	8.4	6.7	2.1
1,2,3-Trichlorobenzene	ug/l	-	-	-	-	-	-	-	ND (0.50)	-	ND (0.50)	ND (0.50)	ND (0.50)
1,2,4-Trichlorobenzene	ug/l	9	-	-	-	-	-	-	ND (0.50)	-	ND (0.50)	ND (0.50)	ND (0.50)
1,1,1-Trichloroethane	ug/l	30	-	-	-	-	-	-	ND (0.22)	-	ND (0.25)	ND (0.25)	ND (0.25)
1,1,2-Trichloroethane	ug/l	3	-	-	-	-	-	-	ND (0.28)	-	ND (0.24)	ND (0.24)	ND (0.24)
Trichloroethene	ug/l	1	-	-	-	-	-	-	ND (0.26)	-	ND (0.27)	ND (0.27)	ND (0.27)
Trichlorofluoromethane	ug/l	2000	-	-	-	-	-	-	ND (0.58)	-	ND (0.60)	ND (0.60)	ND (0.60) [b]
Vinyl chloride	ug/l	1	-	-	-	-	-	-	ND (0.33)	-	ND (0.62)	ND (0.62)	ND (0.62)
m,p-Xylene	ug/l	-	-	-	-	-	-	-	3.4	-	3.2	3.1	3.8
o-Xylene	ug/l	-	-	-	-	-	-	-	7.3	-	7.3	6.5	8.6
Xylene (total)	ug/l	1000	-	-	-	-	-	-	10.7	-	10.5	9.6	12.4
GC/MS Volatile TIC													
Total TIC, Volatile	ug/l	-	-	-	-	-	-	-	784.9 J	-	582.3 J	680.8 J	975.3 J
Total Alkanes	ug/l	-	-	-	-	-	-	-	0	-	0	0	0
GC/MS Semi-volatiles (SW846 8270D)													
2-Chlorophenol	ug/l	40	-	-	-	-	-	-	ND (0.82)	-	ND (0.82)	ND (0.82)	ND (0.85)
4-Chloro-3-methyl phenol	ug/l	100	-	-	-	-	-	-	ND (0.89)	-	ND (0.89)	ND (0.89)	ND (0.92)
2,4-Dichlorophenol	ug/l	20	-	-	-	-	-	-	ND (1.3)	-	ND (1.3)	ND (1.3)	ND (1.3)
2,4-Dimethylphenol	ug/l	100	-	-	-	-	-	-	ND (2.4)	-	ND (2.4)	ND (2.4)	ND (2.5)
2,4-Dinitrophenol	ug/l	40	-	-	-	-	-	-	ND (1.6)	-	ND (1.6)	ND (1.6) [b]	ND (1.6) [b]
2-Methylphenol	ug/l	50	-	-	-	-	-	-	ND (0.89)	-	ND (0.89)	ND (0.89)	ND (0.92)
3&4-Methylphenol	ug/l	50	-	-	-	-	-	-	ND (0.88)	-	ND (0.88)	ND (0.88)	ND (0.91)
2-Nitrophenol	ug/l	-	-	-	-	-	-	-	ND (0.96)	-	ND (0.96)	ND (0.96)	ND (0.99) [b]
4-Nitrophenol	ug/l	-	-	-	-	-	-	-	ND (1.2)	-	ND (1.2)	ND (1.2)	ND (1.2)
Phenol	ug/l	2000	-	-	-	-	-	-	ND (0.39)	-	ND (0.39)	ND (0.39)	ND (0.40)
2,3,4,6-Tetrachlorophenol	ug/l	200	-	-	-	-	-	-	ND (1.5)	-	ND (1.5)	ND (1.5)	ND (1.5)
2,4,5-Trichlorophenol	ug/l	700	-	-	-	-	-	-	ND (1.3)	-	ND (1.3)	ND (1.3)	ND (1.4)
2,4,6-Trichlorophenol	ug/l	20	-	-	-	-	-	-	ND (0.92)	-	ND (0.92)	ND (0.92)	ND (0.95)
Acenaphthene	ug/l	400	-	-	-	-	-	-	ND (0.19)	-	ND (0.19)	ND (0.19)	ND (0.20)
Acenaphthylene	ug/l	100	-	-	-	-	-	-	ND (0.14)	-	ND (0.14)	ND (0.14)	ND (0.14)
Acetophenone	ug/l	700	-	-	-	-	-	-	ND (0.21)	-	ND (0.21)	ND (0.21)	ND (0.21)
Anthracene	ug/l	2000	-	-	-	-	-	-	ND (0.21)	-	ND (0.21)	ND (0.21)	ND (0.22)
Atrazine	ug/l	3	-	-	-	-	-	-	ND (0.45)	-	ND (0.45)	ND (0.45)	ND (0.46) [b]

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-4S					MW-4D					
Lab Sample ID:			JC39631-3	JC39743-2	JC45784-3	JC51803-4	JC57765-10	JC39631-4	JC39743-1	JC39743-1R	JC45784-4	JC51803-3	JC57765-3
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/27/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Benzaldehyde	ug/l	-	-	-	-	-	-	-	ND (0.29)	-	ND (0.29)	ND (0.29) [d]	ND (0.30)
Benzo(g,h,i)perylene	ug/l	100	-	-	-	-	-	-	ND (0.34)	-	ND (0.34)	ND (0.34)	ND (0.35)
4-Bromophenyl phenyl ether	ug/l	-	-	-	-	-	-	-	ND (0.40)	-	ND (0.40)	ND (0.40)	ND (0.42)
Butyl benzyl phthalate	ug/l	100	-	-	-	-	-	-	ND (0.46)	-	ND (0.46)	ND (0.46) [b]	ND (0.47)
1,1'-Biphenyl	ug/l	400	-	-	-	-	-	-	ND (0.21)	-	ND (0.21)	ND (0.21)	ND (0.22)
2-Chloronaphthalene	ug/l	600	-	-	-	-	-	-	ND (0.24)	-	ND (0.24)	ND (0.24)	ND (0.24)
4-Chloroaniline	ug/l	30	-	-	-	-	-	-	ND (0.34)	-	ND (0.34)	ND (0.34)	ND (0.35)
Carbazole	ug/l	-	-	-	-	-	-	-	ND (0.23)	-	ND (0.23)	ND (0.23)	ND (0.24)
Caprolactam	ug/l	5000	-	-	-	-	-	-	ND (0.65)	-	ND (0.65)	ND (0.65) [b]	ND (0.67)
Chrysene	ug/l	5	-	-	-	-	-	-	ND (0.18)	-	ND (0.18)	ND (0.18)	ND (0.18)
bis(2-Chloroethoxy)methane	ug/l	-	-	-	-	-	-	-	ND (0.28)	-	ND (0.28)	ND (0.28)	ND (0.29)
bis(2-Chloroethyl)ether	ug/l	7	-	-	-	-	-	-	ND (0.25)	-	ND (0.25)	ND (0.25)	ND (0.26)
bis(2-Chloroisopropyl)ether	ug/l	300	-	-	-	-	-	-	ND (0.40)	-	ND (0.40)	ND (0.40)	ND (0.42)
4-Chlorophenyl phenyl ether	ug/l	-	-	-	-	-	-	-	ND (0.37)	-	ND (0.37)	ND (0.37)	ND (0.38)
2,4-Dinitrotoluene	ug/l	-	-	-	-	-	-	-	ND (0.55)	-	ND (0.55)	ND (0.55)	ND (0.57)
2,6-Dinitrotoluene	ug/l	-	-	-	-	-	-	-	ND (0.48)	-	ND (0.48)	ND (0.48)	ND (0.49)
3,3'-Dichlorobenzidine	ug/l	30	-	-	-	-	-	-	ND (0.51)	-	ND (0.51)	ND (0.51)	ND (0.52)
1,4-Dioxane	ug/l	0.4	-	-	-	-	-	-	**138**	-	**128**	**157**	**193**
Dibenzofuran	ug/l	-	-	-	-	-	-	-	ND (0.22)	-	ND (0.22)	ND (0.22)	ND (0.23)
Di-n-butyl phthalate	ug/l	700	-	-	-	-	-	-	ND (0.50)	-	ND (0.50) [a]	ND (0.50)	ND (0.51)
Di-n-octyl phthalate	ug/l	100	-	-	-	-	-	-	ND (0.23)	-	ND (0.23)	ND (0.23)	ND (0.24) [b]
Diethyl phthalate	ug/l	6000	-	-	-	-	-	-	ND (0.26)	-	ND (0.26)	ND (0.26)	ND (0.27)
Dimethyl phthalate	ug/l	100	-	-	-	-	-	-	ND (0.22)	-	ND (0.22)	ND (0.22)	ND (0.22)
bis(2-Ethylhexyl)phthalate	ug/l	3	-	-	-	-	-	-	ND (1.7)	-	**3.1**	ND (1.7)	ND (1.7)
Fluoranthene	ug/l	300	-	-	-	-	-	-	ND (0.17)	-	ND (0.17)	ND (0.17)	ND (0.18)
Fluorene	ug/l	300	-	-	-	-	-	-	ND (0.17)	-	ND (0.17)	ND (0.17)	ND (0.18)
Hexachlorocyclopentadiene	ug/l	40	-	-	-	-	-	-	ND (2.8)	-	ND (2.8)	ND (2.8)	ND (2.9)
Hexachloroethane	ug/l	7	-	-	-	-	-	-	ND (0.39)	-	ND (0.39)	ND (0.39)	ND (0.40)
Isophorone	ug/l	40	-	-	-	-	-	-	ND (0.28)	-	ND (0.28)	ND (0.28)	ND (0.29)
2-Methylnaphthalene	ug/l	30	-	-	-	-	-	-	0.82 J	-	ND (0.21)	ND (0.21)	ND (0.22)
2-Nitroaniline	ug/l	-	-	-	-	-	-	-	ND (0.28)	-	ND (0.28)	ND (0.28) [b]	ND (0.29)
3-Nitroaniline	ug/l	-	-	-	-	-	-	-	ND (0.39)	-	ND (0.39)	ND (0.39)	ND (0.40)
4-Nitroaniline	ug/l	-	-	-	-	-	-	-	ND (0.44)	-	ND (0.44)	ND (0.44)	ND (0.45)
Naphthalene	ug/l	300	-	-	-	-	-	-	0.76 J	-	0.77 J	1	1.2
Nitrobenzene	ug/l	6	-	-	-	-	-	-	ND (0.64)	-	ND (0.64)	ND (0.64)	ND (0.66)
N-Nitroso-di-n-propylamine	ug/l	10	-	-	-	-	-	-	ND (0.48)	-	ND (0.48)	ND (0.48)	ND (0.50)
N-Nitrosodiphenylamine	ug/l	10	-	-	-	-	-	-	ND (0.22)	-	ND (0.22)	ND (0.22)	ND (0.23)
Phenanthrene	ug/l	-	-	-	-	-	-	-	ND (0.18)	-	ND (0.18)	ND (0.18)	ND (0.18)
Pyrene	ug/l	200	-	-	-	-	-	-	ND (0.22)	-	ND (0.22)	ND (0.22)	ND (0.23)
1,2,4,5-Tetrachlorobenzene	ug/l	-	-	-	-	-	-	-	ND (0.37)	-	ND (0.37)	ND (0.37)	ND (0.38)

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-4S					MW-4D					
Lab Sample ID:			JC39631-3	JC39743-2	JC45784-3	JC51803-4	JC57765-10	JC39631-4	JC39743-1	JC39743-1R	JC45784-4	JC51803-3	JC57765-3
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/27/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	**Units**		**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
GC/MS Semi-volatiles (SW846 8270D BY SIM)													
4,6-Dinitro-o-cresol	ug/l	1	-	-	-	-	-	-	ND (0.15)	-	ND (0.15)	ND (0.15)	ND (0.16) [b]
Pentachlorophenol	ug/l	0.3	-	-	-	-	-	-	ND (0.13)	-	ND (0.13)	ND (0.13)	ND (0.13) [b]
Benzo(a)anthracene	ug/l	0.1	-	-	-	-	-	-	ND (0.023)	-	ND (0.023)	ND (0.023)	ND (0.024) [b]
Benzo(a)pyrene	ug/l	0.1	-	-	-	-	-	-	ND (0.033)	-	ND (0.033)	ND (0.033)	ND (0.034)
Benzo(b)fluoranthene	ug/l	0.2	-	-	-	-	-	-	ND (0.043)	-	ND (0.043)	ND (0.043)	ND (0.045)
Benzo(k)fluoranthene	ug/l	0.5	-	-	-	-	-	-	ND (0.033)	-	ND (0.033)	ND (0.033)	ND (0.034)
Dibenzo(a,h)anthracene	ug/l	0.3	-	-	-	-	-	-	ND (0.036)	-	ND (0.036)	ND (0.036)	ND (0.037)
Hexachlorobenzene	ug/l	0.02	-	-	-	-	-	-	ND (0.011)	-	ND (0.011)	ND (0.011)	ND (0.011)
Hexachlorobutadiene	ug/l	1	-	-	-	-	-	-	ND (0.018)	-	ND (0.018)	ND (0.018)	ND (0.018)
Indeno(1,2,3-cd)pyrene	ug/l	0.2	-	-	-	-	-	-	ND (0.038)	-	ND (0.038)	ND (0.038)	ND (0.039)
1,4-Dioxane	ug/l	0.4	-	-	-	-	-	-	-	-	-	-	-
GC/MS Semi-volatile TIC													
Total TIC, Semi-Volatile	ug/l	-	-	-	-	-	-	-	72.2 J	-	173.5 J	464.6 J	530 J
Total Alkanes	ug/l	-	-	-	-	-	-	-	0	-	0	0	0
GC Semi-volatiles (SW846 8081B)													
Aldrin	ug/l	0.04	-	-	-	-	-	-	ND (0.0062)	-	ND (0.0040)	ND (0.0052)	ND (0.0026)
alpha-BHC	ug/l	0.02	-	-	-	-	-	-	ND (0.0061)	-	ND (0.0040)	ND (0.0052)	ND (0.0026)
beta-BHC	ug/l	0.04	-	-	-	-	-	-	ND (0.0058)	-	ND (0.0038)	ND (0.0080)	ND (0.0040)
delta-BHC	ug/l	-	-	-	-	-	-	-	ND (0.0047)	-	ND (0.0030)	ND (0.0066)	ND (0.0033)
gamma-BHC (Lindane)	ug/l	0.03	-	-	-	-	-	-	ND (0.0028)	-	ND (0.0019)	ND (0.0060)	ND (0.0030)
alpha-Chlordane	ug/l	0.5	-	-	-	-	-	-	ND (0.0047)	-	ND (0.0031)	ND (0.0049)	ND (0.0025)
gamma-Chlordane	ug/l	0.5	-	-	-	-	-	-	ND (0.0047)	-	ND (0.0031)	ND (0.0043)	ND (0.0022)
Chlordane (alpha and gamma)	ug/l	0.5	-	-	-	-	-	-	ND (0.0047)	-	ND (0.0031)	ND (0.0043)	ND (0.0022)
Dieldrin	ug/l	0.03	-	-	-	-	-	-	ND (0.0037)	-	ND (0.0024)	ND (0.0077)	ND (0.0039)
4,4'-DDD	ug/l	0.1	-	-	-	-	-	-	ND (0.0039)	-	ND (0.0025)	ND (0.0057)	ND (0.0029)
4,4'-DDE	ug/l	0.1	-	-	-	-	-	-	ND (0.0063)	-	ND (0.0041)	ND (0.0051)	ND (0.0026)
4,4'-DDT	ug/l	0.1	-	-	-	-	-	-	ND (0.0051)	-	ND (0.0033)	ND (0.0069)	ND (0.0035)
Endrin	ug/l	2	-	-	-	-	-	-	ND (0.0051)	-	ND (0.0034)	ND (0.0061)	ND (0.0031)
Endosulfan sulfate	ug/l	40	-	-	-	-	-	-	ND (0.0054)	-	ND (0.0035)	ND (0.0055)	ND (0.0028)
Endrin aldehyde	ug/l	-	-	-	-	-	-	-	ND (0.0052)	-	ND (0.0034)	ND (0.0067)	ND (0.0034)
Endrin ketone	ug/l	-	-	-	-	-	-	-	ND (0.0052)	-	ND (0.0034)	ND (0.0062)	ND (0.0031)
Endosulfan-I	ug/l	40	-	-	-	-	-	-	ND (0.0051)	-	ND (0.0033)	ND (0.0053)	ND (0.0027)
Endosulfan-II	ug/l	40	-	-	-	-	-	-	ND (0.0044)	-	ND (0.0029)	ND (0.0049)	ND (0.0025)
Heptachlor	ug/l	0.05	-	-	-	-	-	-	ND (0.0039)	-	ND (0.0025)	ND (0.0045)	ND (0.0023)

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-4S					MW-4D					
Lab Sample ID:			JC39631-3	JC39743-2	JC45784-3	JC51803-4	JC57765-10	JC39631-4	JC39743-1	JC39743-1R	JC45784-4	JC51803-3	JC57765-3
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/27/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Heptachlor epoxide	ug/l	0.2	-	-	-	-	-	-	ND (0.0067)	-	ND (0.0044)	ND (0.0060)	ND (0.0030)
Methoxychlor	ug/l	40	-	-	-	-	-	-	ND (0.0058)	-	ND (0.0038)	ND (0.0067)	ND (0.0034)
Toxaphene	ug/l	2	-	-	-	-	-	-	ND (0.19)	-	ND (0.12)	ND (0.16)	ND (0.080)
GC Semi-volatiles (SW846 8082A)													
Aroclor 1016	ug/l	0.5	-	-	-	-	-	-	ND (0.15)	-	ND (0.21)	ND (0.20)	ND (0.099)
Aroclor 1221	ug/l	0.5	-	-	-	-	-	-	ND (0.31)	-	ND (0.32)	ND (0.42)	ND (0.21)
Aroclor 1232	ug/l	0.5	-	-	-	-	-	-	ND (0.20)	-	ND (0.16)	ND (0.26)	ND (0.13)
Aroclor 1242	ug/l	0.5	-	-	-	-	-	-	ND (0.28)	-	ND (0.24)	ND (0.23)	ND (0.12)
Aroclor 1248	ug/l	0.5	-	-	-	-	-	-	ND (0.43)	-	ND (0.15)	ND (0.13)	ND (0.064)
Aroclor 1254	ug/l	0.5	-	-	-	-	-	-	ND (0.25)	-	ND (0.17)	ND (0.41)	ND (0.21)
Aroclor 1260	ug/l	0.5	-	-	-	-	-	-	ND (0.41)	-	ND (0.14)	ND (0.15)	ND (0.077)
Aroclor 1268	ug/l	-	-	-	-	-	-	-	ND (0.18)	-	ND (0.16)	ND (0.17)	ND (0.087)
Aroclor 1262	ug/l	-	-	-	-	-	-	-	ND (0.20)	-	ND (0.15)	ND (0.19)	ND (0.097)
Metals Analysis													
Aluminum	ug/l	200	-	-	-	-	-	-	30.9 B	-	**4340 [c]**	122 B	33 U
Antimony	ug/l	6	-	-	-	-	-	-	3.3 U	-	22 U [c]	4.3 U	4.3 U
Arsenic	ug/l	3	-	-	-	-	-	-	**4.3**	-	14 U [c]	**4.8**	2.7 U
Barium	ug/l	6000	-	-	-	-	-	-	1840	-	1970 [c]	1860	2050
Beryllium	ug/l	1	-	-	-	-	-	-	0.25 U	-	2.0 U [c]	0.40 U	0.40 U
Cadmium	ug/l	4	-	-	-	-	-	-	0.60 B	2.0 U	3.5 U [c]	0.70 U	0.70 B
Calcium	ug/l	-	-	-	-	-	-	-	164000	-	190000 [c]	170000	181000
Chromium	ug/l	70	-	-	-	-	-	-	11.6	-	**241 [c]**	10.1	11.5
Cobalt	ug/l	100	-	-	-	-	-	-	3.5 U [c]	-	7.5 B [c]	3.2 B	5.5 B [e]
Copper	ug/l	1300	-	-	-	-	-	-	2.4 U	-	28.5 B [c]	3.2 U	3.2 U
Iron	ug/l	300	-	-	-	-	-	-	**12200**	-	**29300 [c]**	**13600**	**15000**
Lead	ug/l	5	-	-	-	-	-	-	11 U [c]	3.8 U [d]	13 U [c]	2.6 U	13 U [e]
Magnesium	ug/l	-	-	-	-	-	-	-	460000	-	481000	478000	512000
Manganese	ug/l	50	-	-	-	-	-	-	**421**	-	**571 [c]**	**426**	**430**
Mercury	ug/l	2	-	-	-	-	-	-	0.14 U [b]	-	0.34 B [c]	0.17 U [e]	0.083 U
Nickel	ug/l	100	-	-	-	-	-	-	3.8 B [c]	-	**123 [c]**	5.6 B	8.0 B [e]
Potassium	ug/l	-	-	-	-	-	-	-	171000	-	164000 [c]	168000	185000
Selenium	ug/l	40	-	-	-	-	-	-	4.1 U	-	33 U [c]	6.6 U	6.6 U
Silver	ug/l	40	-	-	-	-	-	-	1.0 B	-	16 U [c]	3.1 U	3.1 U
Sodium	ug/l	50000	-	-	-	-	-	-	**4220000**	-	**4320000**	**4450000**	**4660000**
Thallium	ug/l	2	-	-	-	-	-	-	9.5 U [c]	4.9 U [d]	8.2 U [c]	1.8 B	8.2 U [f]
Vanadium	ug/l	-	-	-	-	-	-	-	12.0 B	-	18.5 B [c]	13.2 B	13.3 B

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-4S					MW-4D					
Lab Sample ID:			JC39631-3	JC39743-2	JC45784-3	JC51803-4	JC57765-10	JC39631-4	JC39743-1	JC39743-1R	JC45784-4	JC51803-3	JC57765-3
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/27/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Zinc	ug/l	2000	-	-	-	-	-	-	3.3 B	-	20 U [c]	4.9 B	4.0 U
General Chemistry													
Solids, Total Suspended	mg/l	-	-	-	-	-	-	-	36.3	-	4970	48	52
Field Data													
Turbidity	NTU	-	-	-	-	-	-	-	<0.10 [e]	-	1	52.2	12
Depth To H2O, Top Casing	feet	-	32.18	-	-	-	-	36.79	34.69 [e]	-	32.38	34.74	33.71
Specific Conductivity (Field)	umhos/cm	-	-	-	-	-	-	-	20200 [e]	-	2710	2660	27000
pH (Field)	su	6.5-8.5	-	-	-	-	-	-	**5.93 [e]**	-	**6.2**	**5.45**	**5.87**
Oxygen, Dissolved (Field)	mg/l	-	-	-	-	-	-	-	0.480 [e]	-	0.02	0.74	6.99
Dry		-	-	DRY	DRY	DRY	DRY	-	-	-	-	DRY	-

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-5SR					MW-8SR2					
											DUPLICATE		
Lab Sample ID:			JC39631-5	JC39743-3	JC45784-5	JC51803-5	JC57765-11	JC39631-6	JC39631-6R	JC45784-6	JC45784-9	JC51803-6	JC57765-5
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
GC/MS Volatiles (SW846 8260C)													
Acetone	ug/l	6000	-	-	-	-	-	ND (130)	-	143 J	ND (130)	54.6 J	25.7 J [a]
Benzene	ug/l	1	-	-	-	-	-	**40.9**	-	**102**	**94.5**	**33.5**	**27.6**
Bromochloromethane	ug/l	-	-	-	-	-	-	ND (12)	-	ND (9.6)	ND (9.6)	ND (3.8)	ND (1.9)
Bromodichloromethane	ug/l	1	-	-	-	-	-	ND (14)	-	ND (5.4)	ND (5.4)	ND (2.2)	ND (1.1)
Bromoform	ug/l	4	-	-	-	-	-	ND (8.5)	-	ND (11)	ND (11)	ND (4.2)	ND (2.1)
Bromomethane	ug/l	10	-	-	-	-	-	ND (12)	-	ND (34)	ND (34)	ND (14)	ND (6.9)
2-Butanone (MEK)	ug/l	300	-	-	-	-	-	ND (47)	-	ND (120)	ND (120)	ND (48)	ND (24)
Carbon disulfide	ug/l	700	-	-	-	-	-	ND (8.3)	-	ND (5.9)	ND (5.9)	ND (2.3)	ND (2.5)
Carbon tetrachloride	ug/l	1	-	-	-	-	-	ND (13)	-	ND (8.4)	ND (8.4)	ND (3.4)	ND (1.7)
Chlorobenzene	ug/l	50	-	-	-	-	-	**59.3**	-	30.6	28.5	**54.3**	**61.9**
Chloroethane	ug/l	5	-	-	-	-	-	ND (11)	-	ND (15)	ND (15)	ND (5.9)	ND (3.0)
Chloroform	ug/l	70	-	-	-	-	-	ND (5.7)	-	ND (7.2)	ND (7.2)	ND (2.9)	ND (1.4)
Chloromethane	ug/l	-	-	-	-	-	-	ND (24)	-	ND (13)	ND (13)	ND (5.3)	ND (2.7)
Cyclohexane	ug/l	-	-	-	-	-	-	38.7 J	-	95.6 J	93.4 J	33.2 J	33
1,2-Dibromo-3-chloropropane	ug/l	0.02	-	-	-	-	-	ND (17)	-	ND (17)	ND (17)	ND (6.9)	ND (3.4)
Dibromochloromethane	ug/l	1	-	-	-	-	-	ND (5.7)	-	ND (4.1)	ND (4.1)	ND (1.6)	ND (0.82)
1,2-Dibromoethane	ug/l	0.03	-	-	-	-	-	ND (5.6)	-	ND (5.3)	ND (5.3)	ND (2.1)	ND (1.1)
1,2-Dichlorobenzene	ug/l	600	-	-	-	-	-	ND (5.8)	-	ND (13)	ND (13)	ND (5.0)	ND (2.5)
1,3-Dichlorobenzene	ug/l	600	-	-	-	-	-	ND (4.8)	-	ND (13)	ND (13)	ND (5.0)	ND (2.5)
1,4-Dichlorobenzene	ug/l	75	-	-	-	-	-	ND (5.3)	-	ND (13)	ND (13)	ND (5.0)	4.3 J
Dichlorodifluoromethane	ug/l	1000	-	-	-	-	-	ND (18)	-	ND (47)	ND (47)	ND (19) [c]	ND (9.3)
1,1-Dichloroethane	ug/l	50	-	-	-	-	-	ND (5.1)	-	ND (5.2)	ND (5.2)	ND (2.1)	ND (1.0)
1,2-Dichloroethane	ug/l	2	-	-	-	-	-	ND (9.8)	-	ND (5.0)	ND (5.0)	ND (2.0)	ND (1.0)
1,1-Dichloroethene	ug/l	1	-	-	-	-	-	ND (5.1)	-	ND (12)	ND (12)	ND (4.7)	ND (2.4)
cis-1,2-Dichloroethene	ug/l	70	-	-	-	-	-	ND (7.7)	-	ND (12)	ND (12)	ND (5.0)	ND (2.5)
trans-1,2-Dichloroethene	ug/l	100	-	-	-	-	-	ND (8.9)	-	ND (10)	ND (10)	ND (4.0)	ND (2.0)
1,2-Dichloropropane	ug/l	1	-	-	-	-	-	ND (8.2)	-	ND (5.9)	ND (5.9)	ND (2.4)	ND (1.2) [b]
cis-1,3-Dichloropropene	ug/l	-	-	-	-	-	-	ND (4.6)	-	ND (6.3)	ND (6.3)	ND (2.5)	ND (1.3)
trans-1,3-Dichloropropene	ug/l	-	-	-	-	-	-	ND (6.5)	-	ND (5.4)	ND (5.4)	ND (2.2)	ND (1.1)
Ethylbenzene	ug/l	700	-	-	-	-	-	**1500**	-	**4590**	**4320**	**838**	661
Freon 113	ug/l	20000	-	-	-	-	-	ND (29) [a]	-	ND (31)	ND (31)	ND (12)	ND (6.2)
2-Hexanone	ug/l	300	-	-	-	-	-	ND (38)	-	ND (81)	ND (81)	ND (33)	ND (16)
Isopropylbenzene	ug/l	700	-	-	-	-	-	21.2 J	-	34.4	30.7	24.3	25.9
Methyl Acetate	ug/l	7000	-	-	-	-	-	ND (39)	-	ND (77)	ND (77)	ND (31)	ND (15)
Methylcyclohexane	ug/l	-	-	-	-	-	-	79.4 J	-	146	133	68.4	75.2
Methyl Tert Butyl Ether	ug/l	70	-	-	-	-	-	ND (8.5)	-	ND (6.3)	ND (6.3)	ND (2.5)	ND (1.3)
4-Methyl-2-pentanone(MIBK)	ug/l	-	-	-	-	-	-	966	-	8510	7980	690	863
Methylene chloride	ug/l	3	-	-	-	-	-	ND (25)	-	ND (25)	ND (25)	ND (10)	ND (5.0)

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-5SR					MW-8SR2					
											DUPLICATE		
Lab Sample ID:			JC39631-5	JC39743-3	JC45784-5	JC51803-5	JC57765-11	JC39631-6	JC39631-6R	JC45784-6	JC45784-9	JC51803-6	JC57765-5
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	**Units**		**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
Styrene	ug/l	100	-	-	-	-	-	ND (6.8)	-	ND (6.1)	ND (6.1)	ND (2.4)	ND (1.2)
1,1,2,2-Tetrachloroethane	ug/l	1	-	-	-	-	-	ND (9.8)	-	ND (4.2)	ND (4.2)	ND (1.7)	ND (0.84)
Tetrachloroethene	ug/l	1	-	-	-	-	-	ND (5.8)	-	ND (13)	ND (13)	ND (5.0)	ND (2.5)
Toluene	ug/l	600	-	-	-	-	-	**4160**	-	**36800**	**35600**	**1620**	**1500**
1,2,3-Trichlorobenzene	ug/l	-	-	-	-	-	-	ND (13)	-	ND (13)	ND (13)	ND (5.0)	ND (2.5)
1,2,4-Trichlorobenzene	ug/l	9	-	-	-	-	-	ND (13)	-	ND (13)	ND (13)	ND (5.0)	ND (2.5)
1,1,1-Trichloroethane	ug/l	30	-	-	-	-	-	ND (5.4)	-	ND (6.3)	ND (6.3)	ND (2.5)	ND (1.3)
1,1,2-Trichloroethane	ug/l	3	-	-	-	-	-	ND (6.9)	-	ND (6.0)	ND (6.0)	ND (2.4)	ND (1.2)
Trichloroethene	ug/l	1	-	-	-	-	-	ND (6.4)	-	ND (6.7)	ND (6.7)	ND (2.7)	ND (1.3)
Trichlorofluoromethane	ug/l	2000	-	-	-	-	-	ND (15)	-	ND (15)	ND (15)	ND (6.0)	ND (3.0) [c]
Vinyl chloride	ug/l	1	-	-	-	-	-	ND (8.1)	-	ND (16)	ND (16)	ND (6.2)	ND (3.1)
m,p-Xylene	ug/l	-	-	-	-	-	-	3890	-	7570	7170	2250	2000
o-Xylene	ug/l	-	-	-	-	-	-	666	-	2240	2100	393	291
Xylene (total)	ug/l	1000	-	-	-	-	-	**4560**	-	**9810**	**9270**	**2640**	**2290**
GC/MS Volatile TIC													
Total TIC, Volatile	ug/l	-	-	-	-	-	-	470 J	-	1220 J	990 J	556 J	669 J
Total Alkanes	ug/l	-	-	-	-	-	-	0	-	270 J	250 J	0	0
GC/MS Semi-volatiles (SW846 8270D)													
2-Chlorophenol	ug/l	40	-	-	-	-	-	ND (0.82)	-	ND (0.82)	ND (0.82)	ND (0.82)	ND (0.82)
4-Chloro-3-methyl phenol	ug/l	100	-	-	-	-	-	ND (0.89)	-	ND (0.89)	ND (0.89)	ND (0.89)	ND (0.89)
2,4-Dichlorophenol	ug/l	20	-	-	-	-	-	ND (1.3)	-	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)
2,4-Dimethylphenol	ug/l	100	-	-	-	-	-	15.3	-	27.6	36.7	14.1	6.7
2,4-Dinitrophenol	ug/l	40	-	-	-	-	-	ND (1.6)	-	ND (1.6)	ND (1.6)	ND (1.6) [b]	ND (1.6) [b]
2-Methylphenol	ug/l	50	-	-	-	-	-	41.6	-	38.5	**53.1**	ND (0.89)	3.9
3&4-Methylphenol	ug/l	50	-	-	-	-	-	16.8	-	**88.1**	**115**	14.8	8.4
2-Nitrophenol	ug/l	-	-	-	-	-	-	ND (0.96)	-	ND (0.96)	ND (0.96)	ND (0.96)	ND (0.96) [b]
4-Nitrophenol	ug/l	-	-	-	-	-	-	ND (1.2)	-	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
Phenol	ug/l	2000	-	-	-	-	-	ND (0.39)	-	ND (0.39)	5.1	ND (0.39)	ND (0.39)
2,3,4,6-Tetrachlorophenol	ug/l	200	-	-	-	-	-	ND (1.5)	-	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)
2,4,5-Trichlorophenol	ug/l	700	-	-	-	-	-	ND (1.3)	-	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)
2,4,6-Trichlorophenol	ug/l	20	-	-	-	-	-	ND (0.92)	-	ND (0.92)	ND (0.92)	ND (0.92)	ND (0.92)
Acenaphthene	ug/l	400	-	-	-	-	-	1.7	-	0.87 J	1.2	1.2	2.2
Acenaphthylene	ug/l	100	-	-	-	-	-	0.96 J	-	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)
Acetophenone	ug/l	700	-	-	-	-	-	ND (0.21)	-	2.4 B	5.7 B	ND (0.21)	ND (0.21)
Anthracene	ug/l	2000	-	-	-	-	-	0.75 J	-	0.51 J	0.88 J	0.86 J	0.92 J
Atrazine	ug/l	3	-	-	-	-	-	ND (0.45)	-	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45) [b]

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-5SR					MW-8SR2					
											DUPLICATE		
Lab Sample ID:			JC39631-5	JC39743-3	JC45784-5	JC51803-5	JC57765-11	JC39631-6	JC39631-6R	JC45784-6	JC45784-9	JC51803-6	JC57765-5
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Benzaldehyde	ug/l	-	-	-	-	-	-	ND (0.29)	-	ND (0.29)	ND (0.29)	ND (0.29) [d]	ND (0.29)
Benzo(g,h,i)perylene	ug/l	100	-	-	-	-	-	1.8	-	0.41 J	0.49 J	0.78 J	2.2
4-Bromophenyl phenyl ether	ug/l	-	-	-	-	-	-	ND (0.40)	-	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
Butyl benzyl phthalate	ug/l	100	-	-	-	-	-	ND (0.46)	-	ND (0.46)	ND (0.46)	ND (0.46) [b]	ND (0.46)
1,1'-Biphenyl	ug/l	400	-	-	-	-	-	0.64 J	-	ND (0.21)	ND (0.21)	ND (0.21)	0.46 J
2-Chloronaphthalene	ug/l	600	-	-	-	-	-	ND (0.24)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)
4-Chloroaniline	ug/l	30	-	-	-	-	-	ND (0.34)	-	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)
Carbazole	ug/l	-	-	-	-	-	-	ND (0.23)	-	ND (0.23)	ND (0.23)	0.46 J	ND (0.23)
Caprolactam	ug/l	5000	-	-	-	-	-	ND (0.65)	-	ND (0.65)	ND (0.65)	ND (0.65) [b]	ND (0.65)
Chrysene	ug/l	5	-	-	-	-	-	1.3	-	ND (0.18)	0.46 J	0.69 J	1.5
bis(2-Chloroethoxy)methane	ug/l	-	-	-	-	-	-	ND (0.28)	-	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)
bis(2-Chloroethyl)ether	ug/l	7	-	-	-	-	-	ND (0.25)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
bis(2-Chloroisopropyl)ether	ug/l	300	-	-	-	-	-	ND (0.40)	-	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
4-Chlorophenyl phenyl ether	ug/l	-	-	-	-	-	-	ND (0.37)	-	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)
2,4-Dinitrotoluene	ug/l	-	-	-	-	-	-	ND (0.55)	-	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)
2,6-Dinitrotoluene	ug/l	-	-	-	-	-	-	ND (0.48)	-	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)
3,3'-Dichlorobenzidine	ug/l	30	-	-	-	-	-	ND (0.51)	-	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)
1,4-Dioxane	ug/l	0.4	-	-	-	-	-	**79.5**	-	**97.2**	**107**	**66.7**	**63.3**
Dibenzofuran	ug/l	-	-	-	-	-	-	0.90 J	-	0.51 J	0.68 J	0.71 J	1.3 J
Di-n-butyl phthalate	ug/l	700	-	-	-	-	-	ND (0.50)	-	ND (0.50) [a]	ND (0.50)	ND (0.50)	ND (0.50)
Di-n-octyl phthalate	ug/l	100	-	-	-	-	-	ND (0.23)	-	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23) [b]
Diethyl phthalate	ug/l	6000	-	-	-	-	-	ND (0.26)	-	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)
Dimethyl phthalate	ug/l	100	-	-	-	-	-	ND (0.22)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)
bis(2-Ethylhexyl)phthalate	ug/l	3	-	-	-	-	-	**9.2**	-	**3.7**	**5.3**	**5.5**	**10.1**
Fluoranthene	ug/l	300	-	-	-	-	-	1.7	-	0.46 J	0.76 J	0.98 J	2
Fluorene	ug/l	300	-	-	-	-	-	1.5	-	1.1	1.6	1.2	2.2
Hexachlorocyclopentadiene	ug/l	40	-	-	-	-	-	ND (2.8)	-	ND (2.8)	ND (2.8)	ND (2.8)	ND (2.8)
Hexachloroethane	ug/l	7	-	-	-	-	-	ND (0.39)	-	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)
Isophorone	ug/l	40	-	-	-	-	-	ND (0.28)	-	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)
2-Methylnaphthalene	ug/l	30	-	-	-	-	-	3.2	-	1.6	2.1	2.4	2.9
2-Nitroaniline	ug/l	-	-	-	-	-	-	ND (0.28)	-	ND (0.28)	ND (0.28)	ND (0.28) [b]	ND (0.28)
3-Nitroaniline	ug/l	-	-	-	-	-	-	ND (0.39)	-	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)
4-Nitroaniline	ug/l	-	-	-	-	-	-	ND (0.44)	-	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)
Naphthalene	ug/l	300	-	-	-	-	-	15.8	-	16.7	22.5	12.4	10.8
Nitrobenzene	ug/l	6	-	-	-	-	-	ND (0.64)	-	ND (0.64)	ND (0.64)	ND (0.64)	ND (0.64)
N-Nitroso-di-n-propylamine	ug/l	10	-	-	-	-	-	ND (0.48)	-	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)
N-Nitrosodiphenylamine	ug/l	10	-	-	-	-	-	**38**	-	**20.8**	**28.9**	**35.2**	**36.1**
Phenanthrene	ug/l	-	-	-	-	-	-	2.3	-	0.96 J	1.3	1.8	2.7
Pyrene	ug/l	200	-	-	-	-	-	1.5	-	0.45 J	0.65 J	0.92 J	1.8
1,2,4,5-Tetrachlorobenzene	ug/l	-	-	-	-	-	-	ND (0.37)	-	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-5SR					MW-8SR2					
											DUPLICATE		
Lab Sample ID:			JC39631-5	JC39743-3	JC45784-5	JC51803-5	JC57765-11	JC39631-6	JC39631-6R	JC45784-6	JC45784-9	JC51803-6	JC57765-5
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
GC/MS Semi-volatiles (SW846 8270D BY SIM)													
4,6-Dinitro-o-cresol	ug/l	1	-	-	-	-	-	ND (0.15)	-	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.15) [b]
Pentachlorophenol	ug/l	0.3	-	-	-	-	-	ND (0.13)	-	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13) [b]
Benzo(a)anthracene	ug/l	0.1	-	-	-	-	-	**1.07**	-	**0.392**	**0.451**	**0.67**	**1.23** [a]
Benzo(a)pyrene	ug/l	0.1	-	-	-	-	-	**1.48**	-	**0.307**	**0.35**	**0.629**	**1.55**
Benzo(b)fluoranthene	ug/l	0.2	-	-	-	-	-	**1.21**	-	**0.216**	**0.224**	**0.482**	**1.3**
Benzo(k)fluoranthene	ug/l	0.5	-	-	-	-	-	0.279	-	ND (0.033)	ND (0.033)	ND (0.033)	0.2
Dibenzo(a,h)anthracene	ug/l	0.3	-	-	-	-	-	**0.512**	-	0.148	0.163	0.233	**0.611**
Hexachlorobenzene	ug/l	0.02	-	-	-	-	-	ND (0.011)	-	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)
Hexachlorobutadiene	ug/l	1	-	-	-	-	-	ND (0.018)	-	ND (0.018)	ND (0.018)	ND (0.018)	ND (0.018)
Indeno(1,2,3-cd)pyrene	ug/l	0.2	-	-	-	-	-	**0.636**	-	0.168	0.174	**0.251**	**0.953**
1,4-Dioxane	ug/l	0.4	-	-	-	-	-	-	-	-	-	-	-
GC/MS Semi-volatile TIC													
Total TIC, Semi-Volatile	ug/l	-	-	-	-	-	-	3264 J	-	5150 J	6299 J	2868 J	-
Total Alkanes	ug/l	-	-	-	-	-	-	0	-	0	0	0	-
GC Semi-volatiles (SW846 8081B)													
Aldrin	ug/l	0.04	-	-	-	-	-	ND (0.0060)	-	ND (0.0040)	ND (0.0040)	ND (0.0052)	ND (0.0026)
alpha-BHC	ug/l	0.02	-	-	-	-	-	ND (0.0060)	-	ND (0.0040)	ND (0.0040)	ND (0.0052)	ND (0.0026)
beta-BHC	ug/l	0.04	-	-	-	-	-	ND (0.0057)	-	ND (0.0038)	ND (0.0038)	ND (0.0080)	ND (0.0040)
delta-BHC	ug/l	-	-	-	-	-	-	ND (0.0046)	-	ND (0.0030)	ND (0.0030)	ND (0.0066)	ND (0.0033)
gamma-BHC (Lindane)	ug/l	0.03	-	-	-	-	-	ND (0.0028)	-	ND (0.0019)	ND (0.0019)	ND (0.0060)	ND (0.0030)
alpha-Chlordane	ug/l	0.5	-	-	-	-	-	ND (0.0046)	-	ND (0.0031)	ND (0.0031)	ND (0.0049)	ND (0.0025)
gamma-Chlordane	ug/l	0.5	-	-	-	-	-	ND (0.0046)	-	ND (0.0031)	ND (0.0031)	ND (0.0043)	ND (0.0021)
Chlordane (alpha and gamma)	ug/l	0.5	-	-	-	-	-	ND (0.0046)	-	ND (0.0031)	ND (0.0031)	ND (0.0043)	ND (0.0021)
Dieldrin	ug/l	0.03	-	-	-	-	-	ND (0.0036)	-	ND (0.0024)	ND (0.0024)	ND (0.0077)	ND (0.0038)
4,4'-DDD	ug/l	0.1	-	-	-	-	-	ND (0.0038)	-	ND (0.0025)	ND (0.0025)	ND (0.0057)	ND (0.0029)
4,4'-DDE	ug/l	0.1	-	-	-	-	-	ND (0.0062)	-	ND (0.0041)	ND (0.0041)	ND (0.0051)	ND (0.0025)
4,4'-DDT	ug/l	0.1	-	-	-	-	-	ND (0.0050)	-	ND (0.0033)	ND (0.0033)	ND (0.0069)	ND (0.0034)
Endrin	ug/l	2	-	-	-	-	-	ND (0.0050)	-	ND (0.0034)	ND (0.0034)	ND (0.0061)	ND (0.0030)
Endosulfan sulfate	ug/l	40	-	-	-	-	-	ND (0.0053)	-	ND (0.0035)	ND (0.0035)	ND (0.0055)	ND (0.0027)
Endrin aldehyde	ug/l	-	-	-	-	-	-	ND (0.0051)	-	ND (0.0034)	ND (0.0034)	ND (0.0067)	ND (0.0034)
Endrin ketone	ug/l	-	-	-	-	-	-	ND (0.0051)	-	ND (0.0034)	ND (0.0034)	ND (0.0062)	ND (0.0031)
Endosulfan-I	ug/l	40	-	-	-	-	-	ND (0.0050)	-	ND (0.0033)	ND (0.0033)	ND (0.0053)	ND (0.0026)
Endosulfan-II	ug/l	40	-	-	-	-	-	ND (0.0043)	-	ND (0.0029)	ND (0.0029)	ND (0.0049)	ND (0.0024)
Heptachlor	ug/l	0.05	-	-	-	-	-	ND (0.0038)	-	ND (0.0025)	ND (0.0025)	ND (0.0045)	ND (0.0022)

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-5SR					MW-8SR2					
											DUPLICATE		
Lab Sample ID:			JC39631-5	JC39743-3	JC45784-5	JC51803-5	JC57765-11	JC39631-6	JC39631-6R	JC45784-6	JC45784-9	JC51803-6	JC57765-5
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Heptachlor epoxide	ug/l	0.2	-	-	-	-	-	ND (0.0065)	-	ND (0.0044)	0.0056 J [b]	ND (0.0060)	ND (0.0030)
Methoxychlor	ug/l	40	-	-	-	-	-	ND (0.0057)	-	ND (0.0038)	ND (0.0038)	ND (0.0067)	ND (0.0034)
Toxaphene	ug/l	2	-	-	-	-	-	ND (0.18)	-	ND (0.12)	ND (0.12)	ND (0.16)	ND (0.080)
GC Semi-volatiles (SW846 8082A)													
Aroclor 1016	ug/l	0.5	-	-	-	-	-	ND (0.15)	-	ND (0.21)	ND (0.21)	ND (0.20)	ND (0.098)
Aroclor 1221	ug/l	0.5	-	-	-	-	-	ND (0.31)	-	ND (0.32)	ND (0.32)	ND (0.42)	ND (0.21)
Aroclor 1232	ug/l	0.5	-	-	-	-	-	ND (0.20)	-	ND (0.16)	ND (0.16)	ND (0.26)	ND (0.13)
Aroclor 1242	ug/l	0.5	-	-	-	-	-	ND (0.28)	-	ND (0.24)	ND (0.24)	ND (0.23)	ND (0.11)
Aroclor 1248	ug/l	0.5	-	-	-	-	-	ND (0.43)	-	ND (0.15)	ND (0.15)	**0.8**	ND (0.063)
Aroclor 1254	ug/l	0.5	-	-	-	-	-	ND (0.24)	-	ND (0.17)	ND (0.17)	ND (0.41)	ND (0.21)
Aroclor 1260	ug/l	0.5	-	-	-	-	-	ND (0.41)	-	ND (0.14)	ND (0.14)	ND (0.15)	ND (0.076)
Aroclor 1268	ug/l	-	-	-	-	-	-	ND (0.18)	-	ND (0.16)	ND (0.16)	ND (0.17)	ND (0.087)
Aroclor 1262	ug/l	-	-	-	-	-	-	ND (0.20)	-	ND (0.15)	ND (0.15)	ND (0.19)	ND (0.097)
Metals Analysis													
Aluminum	ug/l	200	-	-	-	-	-	**636**	-	**272**	**282**	**261**	**274**
Antimony	ug/l	6	-	-	-	-	-	3.3 U	-	4.3 U	4.3 U	4.3 U	4.3 U
Arsenic	ug/l	3	-	-	-	-	-	**3.8**	-	**3.3**	**5.4**	2.9 B	2.7 U
Barium	ug/l	6000	-	-	-	-	-	3150	-	2680	2710	2680	2750
Beryllium	ug/l	1	-	-	-	-	-	0.25 U	-	0.40 U	**1.1**	0.40 U	0.40 U
Cadmium	ug/l	4	-	-	-	-	-	1.3 B	1.4 B [b]	0.70 U	1.2 B	0.70 U	1.3 B
Calcium	ug/l	-	-	-	-	-	-	177000	-	183000	186000	166000	175000
Chromium	ug/l	70	-	-	-	-	-	9.8 B	-	7.7 B	8.8 B	6.9 B	8.3 B
Cobalt	ug/l	100	-	-	-	-	-	2.0 B	-	3.0 B	3.7 B	2.8 B	2.5 B
Copper	ug/l	1300	-	-	-	-	-	16	-	5.6 B	6.7 B	5.1 B	12.4
Iron	ug/l	300	-	-	-	-	-	**18800**	-	**26600**	**27300**	**17900**	**17800**
Lead	ug/l	5	-	-	-	-	-	**63.6**	-	**19.9**	**23.4**	**23.9**	**33.8**
Magnesium	ug/l	-	-	-	-	-	-	48600	-	58400	59900	42400	44700
Manganese	ug/l	50	-	-	-	-	-	**365**	-	**326**	**329**	**352**	**413**
Mercury	ug/l	2	-	-	-	-	-	0.53 B [b]	-	0.16 B	0.25	0.15 B	0.10 B
Nickel	ug/l	100	-	-	-	-	-	5.4 B	-	5.0 B	6.2 B	4.8 B	4.8 B
Potassium	ug/l	-	-	-	-	-	-	37300	-	59200	60800	47200	40200
Selenium	ug/l	40	-	-	-	-	-	4.1 U	-	6.6 U	6.6 U	6.6 U	6.6 U
Silver	ug/l	40	-	-	-	-	-	0.90 B	-	3.1 U	3.1 U	3.1 U	3.1 U
Sodium	ug/l	50000	-	-	-	-	-	**527000**	-	**664000**	**664000**	**433000**	**386000**
Thallium	ug/l	2	-	-	-	-	-	1.9 U	-	1.6 U	1.6 U	1.6 B	1.6 U
Vanadium	ug/l	-	-	-	-	-	-	2.5 B	-	1.7 B	2.7 B	1.5 B	2.0 B

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-5SR					MW-8SR2			DUPLICATE		
Lab Sample ID:			JC39631-5	JC39743-3	JC45784-5	JC51803-5	JC57765-11	JC39631-6	JC39631-6R	JC45784-6	JC45784-9	JC51803-6	JC57765-5
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	**Units**		**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
Zinc	ug/l	2000	-	-	-	-	-	399	-	124	129	157	199
General Chemistry													
Solids, Total Suspended	mg/l	-	-	-	-	-	-	81	-	70.5	64	48	45
Field Data													
Turbidity	NTU	-	-	-	-	-	-	<0.10 [e]	-	15.1	15.1	14.1	24
Depth To H2O, Top Casing	feet	-	27.3	-	-	-	-	12.09	-	12.09	12.09	12.93	12.8
Specific Conductivity (Field)	umhos/cm	-	-	-	-	-	-	4730 [e]	-	4680	4680	3610	3580
pH (Field)	su	6.5-8.5	-	-	-	-	-	**6.06** [e]	-	**5.55**	**5.55**	6.58	6.64 [g]
Oxygen, Dissolved (Field)	mg/l	-	-	-	-	-	-	1.45 [e]	-	0.59	0.59	1.17	0.29
Dry		-	-	DRY	DRY	DRY	DRY	-	-	-	-	-	-

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-8DR3							MW-9SR					
					DUPLICATE	DUPLICATE								DUPLICATE	
Lab Sample ID:			JC39631-7	JC39631-7R	JC39631-9	JC39631-9R	JC45784-7	JC51803-7	JC57765-4	JC39631-8	JC39631-8R	JC45784-8	JC51803-8	JC51803-9	JC57765-6
Date Sampled:			3/24/2017	3/24/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
GC/MS Volatiles (SW846 8260C)															
Acetone	ug/l	6000	ND (5.0)	-	ND (5.0)	-	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	-	6.2 J	ND (5.0)	ND (5.0)	ND (5.0)
Benzene	ug/l	1	ND (0.14)	-	ND (0.14)	-	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.14)	-	ND (0.17)	0.36 J	0.36 J	ND (0.17)
Bromochloromethane	ug/l	-	ND (0.46)	-	ND (0.46)	-	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.46)	-	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)
Bromodichloromethane	ug/l	1	ND (0.55)	-	ND (0.55)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.55)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)
Bromoform	ug/l	4	ND (0.34)	-	ND (0.34)	-	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.34)	-	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)
Bromomethane	ug/l	10	ND (0.46)	-	ND (0.46)	-	ND (1.4)	ND (1.4) [b]	ND (1.4)	ND (0.46)	-	ND (1.4)	ND (1.4) [b]	ND (1.4) [b]	ND (1.4)
2-Butanone (MEK)	ug/l	300	ND (1.9)	-	ND (1.9)	-	ND (4.8)	ND (4.8)	ND (4.8)	ND (1.9)	-	ND (4.8)	ND (4.8)	ND (4.8)	ND (4.8)
Carbon disulfide	ug/l	700	ND (0.33)	-	ND (0.33)	-	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.33)	-	0.25 J	0.33 J	0.35 J	ND (0.50)
Carbon tetrachloride	ug/l	1	ND (0.54)	-	ND (0.54)	-	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.54)	-	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)
Chlorobenzene	ug/l	50	ND (0.17)	-	ND (0.17)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.17)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)
Chloroethane	ug/l	5	ND (0.44)	-	ND (0.44)	-	ND (0.59)	ND (0.59) [b]	ND (0.59)	ND (0.44)	-	ND (0.59)	ND (0.59) [b]	ND (0.59) [b]	ND (0.59)
Chloroform	ug/l	70	ND (0.23)	-	ND (0.23)	-	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.23)	-	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)
Chloromethane	ug/l	-	ND (0.96)	-	ND (0.96)	-	ND (0.53)	ND (0.53) [b]	ND (0.53)	ND (0.96)	-	ND (0.53)	ND (0.53) [b]	ND (0.53) [b]	ND (0.53)
Cyclohexane	ug/l	-	ND (0.73)	-	ND (0.73)	-	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.73)	-	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)
1,2-Dibromo-3-chloropropane	ug/l	0.02	ND (0.69)	-	ND (0.69)	-	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	-	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)
Dibromochloromethane	ug/l	1	ND (0.23)	-	ND (0.23)	-	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.23)	-	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)
1,2-Dibromoethane	ug/l	0.03	ND (0.22)	-	ND (0.22)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.22)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
1,2-Dichlorobenzene	ug/l	600	ND (0.23)	-	ND (0.23)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.23)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,3-Dichlorobenzene	ug/l	600	ND (0.19)	-	ND (0.19)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.19)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,4-Dichlorobenzene	ug/l	75	ND (0.21)	-	ND (0.21)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.21)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
Dichlorodifluoromethane	ug/l	1000	ND (0.70)	-	ND (0.70)	-	ND (1.9)	ND (1.9)	ND (1.9) [b]	ND (0.70)	-	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9) [b]
1,1-Dichloroethane	ug/l	50	ND (0.21)	-	ND (0.21)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
1,2-Dichloroethane	ug/l	2	ND (0.39)	-	ND (0.39)	-	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.39)	-	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
1,1-Dichloroethene	ug/l	1	ND (0.20)	-	ND (0.20)	-	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.20)	-	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)
cis-1,2-Dichloroethene	ug/l	70	ND (0.31)	-	ND (0.31)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.31)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
trans-1,2-Dichloroethene	ug/l	100	ND (0.36)	-	ND (0.36)	-	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.36)	-	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
1,2-Dichloropropane	ug/l	1	ND (0.33)	-	ND (0.33)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.33)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)
cis-1,3-Dichloropropene	ug/l	-	ND (0.19)	-	ND (0.19)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.19)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
trans-1,3-Dichloropropene	ug/l	-	ND (0.26)	-	ND (0.26)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.26)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)
Ethylbenzene	ug/l	700	1.3	-	1.2	-	2.9	0.86 J	0.77 J	ND (0.20)	-	0.22 J	0.90 J	0.88 J	ND (0.22)
Freon 113	ug/l	20000	ND (1.2) [a]	-	ND (1.2) [a]	-	ND (1.2)	ND (1.2)	ND (1.2) [b]	ND (1.2) [a]	-	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2) [b]
2-Hexanone	ug/l	300	ND (1.5)	-	ND (1.5)	-	ND (3.3)	ND (3.3)	ND (3.3)	ND (1.5)	-	ND (3.3)	ND (3.3)	ND (3.3)	ND (3.3)
Isopropylbenzene	ug/l	700	ND (0.16)	-	ND (0.16)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.16)	-	ND (0.25)	0.96 J	0.92 J	0.73 J
Methyl Acetate	ug/l	7000	ND (1.5)	-	ND (1.5)	-	ND (3.1)	ND (3.1)	ND (3.1)	ND (1.5)	-	ND (3.1)	ND (3.1)	ND (3.1)	ND (3.1)
Methylcyclohexane	ug/l	-	ND (0.78)	-	ND (0.78)	-	ND (1.8)	ND (1.8)	ND (1.8)	ND (0.78)	-	ND (1.8)	ND (1.8)	ND (1.8)	ND (1.8)
Methyl Tert Butyl Ether	ug/l	70	ND (0.34)	-	ND (0.34)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.34)	-	ND (0.25)	ND (0.25)	ND (0.25)	0.38 J
4-Methyl-2-pentanone(MIBK)	ug/l	-	ND (1.2)	-	ND (1.2)	-	ND (3.0)	ND (3.0)	ND (3.0)	ND (1.2)	-	ND (3.0)	ND (3.0)	ND (3.0)	ND (3.0)
Methylene chloride	ug/l	3	ND (1.0)	-	ND (1.0)	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-8DR3							MW-9SR					
					DUPLICATE	DUPLICATE								DUPLICATE	
Lab Sample ID:			JC39631-7	JC39631-7R	JC39631-9	JC39631-9R	JC45784-7	JC51803-7	JC57765-4	JC39631-8	JC39631-8R	JC45784-8	JC51803-8	JC51803-9	JC57765-6
Date Sampled:			3/24/2017	3/24/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Styrene	ug/l	100	ND (0.27)	-	ND (0.27)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.27)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)
1,1,2,2-Tetrachloroethane	ug/l	1	ND (0.39)	-	ND (0.39)	-	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.39)	-	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)
Tetrachloroethene	ug/l	1	ND (0.23)	-	ND (0.23)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.23)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
Toluene	ug/l	600	1.2	-	1.4	-	20.9	ND (0.25)	0.59 J	ND (0.23)	-	ND (0.25)	0.32 J	0.31 J	ND (0.25)
1,2,3-Trichlorobenzene	ug/l	-	ND (0.50)	-	ND (0.50)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,2,4-Trichlorobenzene	ug/l	9	ND (0.50)	-	ND (0.50)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,1,1-Trichloroethane	ug/l	30	ND (0.22)	-	ND (0.22)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.22)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
1,1,2-Trichloroethane	ug/l	3	ND (0.28)	-	ND (0.28)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.28)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)
Trichloroethene	ug/l	1	ND (0.26)	-	ND (0.26)	-	ND (0.27)	ND (0.27)	0.73 J	ND (0.26)	-	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)
Trichlorofluoromethane	ug/l	2000	ND (0.58)	-	ND (0.58)	-	ND (0.60)	ND (0.60)	ND (0.60) [b]	ND (0.58)	-	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60) [b]
Vinyl chloride	ug/l	1	ND (0.33)	-	ND (0.33)	-	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.33)	-	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)
m,p-Xylene	ug/l	-	4.1	-	3.6	-	5.6	2.5	2.5	ND (0.42)	-	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
o-Xylene	ug/l	-	0.52 J	-	0.45 J	-	1.3	0.35 J	0.36 J	ND (0.21)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)
Xylene (total)	ug/l	1000	4.6	-	4	-	6.9	2.9	2.9	ND (0.21)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)
GC/MS Volatile TIC															
Total TIC, Volatile	ug/l	-	0	-	0	-	0	0	0	0	-	0	8.5 J	7.7 J	21 J
Total Alkanes	ug/l	-	0	-	0	-	0	0	0	0	-	0	0	0	0
GC/MS Semi-volatiles (SW846 8270D)															
2-Chlorophenol	ug/l	40	ND (0.83)	-	ND (0.83)	-	ND (0.82)	ND (0.82)	ND (0.82)	ND (0.88)	-	ND (0.84)	ND (0.82)	ND (0.82)	ND (0.85)
4-Chloro-3-methyl phenol	ug/l	100	ND (0.90)	-	ND (0.90)	-	ND (0.89)	ND (0.89)	ND (0.89)	ND (0.96)	-	ND (0.91)	ND (0.89)	ND (0.89)	ND (0.93)
2,4-Dichlorophenol	ug/l	20	ND (1.3)	-	ND (1.3)	-	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.4)	-	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)
2,4-Dimethylphenol	ug/l	100	ND (2.5)	-	ND (2.5)	-	ND (2.4)	ND (2.4)	ND (2.4)	ND (2.6)	-	ND (2.5)	ND (2.4)	ND (2.4)	ND (2.5)
2,4-Dinitrophenol	ug/l	40	ND (1.6)	-	ND (1.6)	-	ND (1.6)	ND (1.6) [b]	ND (1.6) [b]	ND (1.7)	-	ND (1.6)	ND (1.6) [b]	ND (1.6) [b]	ND (1.6) [b]
2-Methylphenol	ug/l	50	ND (0.90)	-	ND (0.90)	-	ND (0.89)	ND (0.89)	ND (0.89)	ND (0.95)	-	ND (0.91)	ND (0.89)	ND (0.89)	ND (0.93)
3&4-Methylphenol	ug/l	50	ND (0.89)	-	ND (0.89)	-	ND (0.88)	ND (0.88)	ND (0.88)	ND (0.95)	-	ND (0.90)	ND (0.88)	ND (0.88)	ND (0.92)
2-Nitrophenol	ug/l	-	ND (0.97)	-	ND (0.97)	-	ND (0.96)	ND (0.96)	ND (0.96) [b]	ND (1.0)	-	ND (0.98)	ND (0.96)	ND (0.96)	ND (1.0) [b]
4-Nitrophenol	ug/l	-	ND (1.2)	-	ND (1.2)	-	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	-	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
Phenol	ug/l	2000	ND (0.40)	-	ND (0.40)	-	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.42)	-	ND (0.40)	ND (0.39)	ND (0.39)	ND (0.41)
2,3,4,6-Tetrachlorophenol	ug/l	200	ND (1.5)	-	ND (1.5)	-	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.6)	-	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)
2,4,5-Trichlorophenol	ug/l	700	ND (1.3)	-	ND (1.3)	-	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.4)	-	ND (1.4)	ND (1.3)	ND (1.3)	ND (1.4)
2,4,6-Trichlorophenol	ug/l	20	ND (0.93)	-	ND (0.93)	-	ND (0.92)	ND (0.92)	ND (0.92)	ND (0.99)	-	ND (0.95)	ND (0.92)	ND (0.92)	ND (0.96)
Acenaphthene	ug/l	400	ND (0.19)	-	ND (0.19)	-	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.21)	-	ND (0.20)	0.42 J	0.43 J	0.48 J
Acenaphthylene	ug/l	100	ND (0.14)	-	ND (0.14)	-	ND (0.14)	ND (0.14)	ND (0.14)	0.43 J	-	ND (0.14)	ND (0.14)	ND (0.14)	0.20 J
Acetophenone	ug/l	700	ND (0.21)	-	ND (0.21)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.22)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.22)
Anthracene	ug/l	2000	ND (0.21)	-	ND (0.21)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.23)	-	ND (0.22)	ND (0.21)	ND (0.21)	0.24 J
Atrazine	ug/l	3	ND (0.45)	-	ND (0.45)	-	ND (0.45)	ND (0.45)	ND (0.45) [b]	ND (0.48)	-	ND (0.46)	ND (0.45)	ND (0.45)	ND (0.47) [b]

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-8DR3							MW-9SR					
					DUPLICATE	DUPLICATE								DUPLICATE	
Lab Sample ID:			JC39631-7	JC39631-7R	JC39631-9	JC39631-9R	JC45784-7	JC51803-7	JC57765-4	JC39631-8	JC39631-8R	JC45784-8	JC51803-8	JC51803-9	JC57765-6
Date Sampled:			3/24/2017	3/24/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Benzaldehyde	ug/l	-	ND (0.29)	-	ND (0.29)	-	ND (0.29)	ND (0.29) [d]	ND (0.29)	ND (0.31)	-	ND (0.30)	ND (0.29) [d]	ND (0.29) [d]	ND (0.30)
Benzo(g,h,i)perylene	ug/l	100	ND (0.34)	-	ND (0.34)	-	ND (0.34)	ND (0.34)	ND (0.34)	0.81 J	-	ND (0.35)	ND (0.34)	ND (0.34)	ND (0.36)
4-Bromophenyl phenyl ether	ug/l	-	ND (0.41)	-	ND (0.41)	-	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.43)	-	ND (0.41)	ND (0.40)	ND (0.40)	ND (0.42)
Butyl benzyl phthalate	ug/l	100	ND (0.46)	-	ND (0.46)	-	ND (0.46)	ND (0.46) [b]	ND (0.46)	ND (0.49)	-	ND (0.47)	ND (0.46) [b]	ND (0.46) [b]	ND (0.48)
1,1'-Biphenyl	ug/l	400	ND (0.21)	-	ND (0.21)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.23)	-	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.22)
2-Chloronaphthalene	ug/l	600	ND (0.24)	-	ND (0.24)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.25)	-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.25)
4-Chloroaniline	ug/l	30	ND (0.34)	-	ND (0.34)	-	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.37)	-	ND (0.35)	ND (0.34)	ND (0.34)	ND (0.35)
Carbazole	ug/l	-	ND (0.23)	-	ND (0.23)	-	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.25)	-	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.24)
Caprolactam	ug/l	5000	ND (0.66)	-	ND (0.66)	-	ND (0.65)	ND (0.65) [b]	ND (0.65)	ND (0.70)	-	ND (0.67)	ND (0.65) [b]	ND (0.65) [b]	ND (0.68)
Chrysene	ug/l	5	ND (0.18)	-	ND (0.18)	-	ND (0.18)	ND (0.18)	ND (0.18)	0.80 J	-	ND (0.18)	ND (0.18)	ND (0.18)	0.19 J
bis(2-Chloroethoxy)methane	ug/l	-	ND (0.28)	-	ND (0.28)	-	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.30)	-	ND (0.29)	ND (0.28)	ND (0.28)	ND (0.29)
bis(2-Chloroethyl)ether	ug/l	7	ND (0.25)	-	ND (0.25)	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.27)	-	ND (0.25)	0.59 J	0.42 J	0.33 J
bis(2-Chloroisopropyl)ether	ug/l	300	ND (0.41)	-	ND (0.41)	-	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.43)	-	ND (0.41)	ND (0.40)	ND (0.40)	ND (0.42)
4-Chlorophenyl phenyl ether	ug/l	-	ND (0.37)	-	ND (0.37)	-	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.39)	-	ND (0.38)	ND (0.37)	ND (0.37)	ND (0.38)
2,4-Dinitrotoluene	ug/l	-	ND (0.56)	-	ND (0.56)	-	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.59)	-	ND (0.57)	ND (0.55)	ND (0.55)	ND (0.58)
2,6-Dinitrotoluene	ug/l	-	ND (0.48)	-	ND (0.48)	-	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.51)	-	ND (0.49)	ND (0.48)	ND (0.48)	ND (0.50)
3,3'-Dichlorobenzidine	ug/l	30	ND (0.51)	-	ND (0.51)	-	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.55)	-	ND (0.52)	ND (0.51)	ND (0.51)	ND (0.53)
1,4-Dioxane	ug/l	0.4	-	-	-	-	-	-	-	**12.3**	-	**10.3**	**44.6**	**35.8**	**28.4**
Dibenzofuran	ug/l	-	ND (0.22)	-	ND (0.22)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.24)	-	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.23)
Di-n-butyl phthalate	ug/l	700	ND (0.50)	-	ND (0.50)	-	ND (0.50) [a]	0.69 J	ND (0.50)	ND (0.53)	-	ND (0.51) [a]	ND (0.50)	ND (0.50)	ND (0.52)
Di-n-octyl phthalate	ug/l	100	ND (0.24)	-	ND (0.24)	-	ND (0.23)	1.3 J	ND (0.23) [b]	ND (0.25)	-	ND (0.24)	ND (0.23)	ND (0.23)	ND (0.24) [b]
Diethyl phthalate	ug/l	6000	ND (0.26)	-	ND (0.26)	-	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.28)	-	ND (0.27)	ND (0.26)	ND (0.26)	ND (0.27)
Dimethyl phthalate	ug/l	100	ND (0.22)	-	ND (0.22)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.23)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.23)
bis(2-Ethylhexyl)phthalate	ug/l	3	ND (1.7)	-	ND (1.7)	-	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.8)	-	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)
Fluoranthene	ug/l	300	ND (0.17)	-	ND (0.17)	-	ND (0.17)	ND (0.17)	ND (0.17)	1.2	-	ND (0.17)	ND (0.17)	ND (0.17)	0.39 J
Fluorene	ug/l	300	ND (0.17)	-	ND (0.17)	-	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.18)	-	ND (0.18)	ND (0.17)	ND (0.17)	0.22 J
Hexachlorocyclopentadiene	ug/l	40	ND (2.8)	-	ND (2.8)	-	ND (2.8)	ND (2.8)	ND (2.8)	ND (3.0)	-	ND (2.9)	ND (2.8)	ND (2.8)	ND (2.9)
Hexachloroethane	ug/l	7	ND (0.39)	-	ND (0.39)	-	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.42)	-	ND (0.40)	ND (0.39)	ND (0.39)	ND (0.41)
Isophorone	ug/l	40	ND (0.28)	-	ND (0.28)	-	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.30)	-	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.29)
2-Methylnaphthalene	ug/l	30	ND (0.21)	-	ND (0.21)	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.23)	-	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.22)
2-Nitroaniline	ug/l	-	ND (0.28)	-	ND (0.28)	-	ND (0.28)	ND (0.28) [b]	ND (0.28)	ND (0.30)	-	ND (0.28)	ND (0.28) [b]	ND (0.28) [b]	ND (0.29)
3-Nitroaniline	ug/l	-	ND (0.39)	-	ND (0.39)	-	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.42)	-	ND (0.40)	ND (0.39)	ND (0.39)	ND (0.40)
4-Nitroaniline	ug/l	-	ND (0.44)	-	ND (0.44)	-	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.47)	-	ND (0.45)	ND (0.44)	ND (0.44)	ND (0.46)
Naphthalene	ug/l	300	ND (0.23)	-	ND (0.23)	-	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.25)	-	ND (0.24)	ND (0.23)	ND (0.23)	ND (0.24)
Nitrobenzene	ug/l	6	ND (0.65)	-	ND (0.65)	-	ND (0.64)	ND (0.64)	ND (0.64)	ND (0.69)	-	ND (0.66)	ND (0.64)	ND (0.64)	ND (0.67)
N-Nitroso-di-n-propylamine	ug/l	10	ND (0.49)	-	ND (0.49)	-	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.52)	-	ND (0.49)	ND (0.48)	ND (0.48)	ND (0.50)
N-Nitrosodiphenylamine	ug/l	10	ND (0.22)	-	ND (0.22)	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.24)	-	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.23)
Phenanthrene	ug/l	-	ND (0.18)	-	ND (0.18)	-	ND (0.18)	ND (0.18)	ND (0.18)	0.47 J	-	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)
Pyrene	ug/l	200	ND (0.22)	-	ND (0.22)	-	ND (0.22)	ND (0.22)	ND (0.22)	1.5	-	ND (0.22)	ND (0.22)	ND (0.22)	0.57 J
1,2,4,5-Tetrachlorobenzene	ug/l	-	ND (0.37)	-	ND (0.37)	-	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.40)	-	ND (0.38)	ND (0.37)	ND (0.37)	ND (0.39)

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-8DR3							MW-9SR					
					DUPLICATE	DUPLICATE								DUPLICATE	
Lab Sample ID:			JC39631-7	JC39631-7R	JC39631-9	JC39631-9R	JC45784-7	JC51803-7	JC57765-4	JC39631-8	JC39631-8R	JC45784-8	JC51803-8	JC51803-9	JC57765-6
Date Sampled:			3/24/2017	3/24/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
GC/MS Semi-volatiles (SW846 8270D BY SIM)															
4,6-Dinitro-o-cresol	ug/l	1	ND (0.15)	-	ND (0.15)	-	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.16)	-	ND (0.16)	ND (0.15)	ND (0.15)	ND (0.16) [b]
Pentachlorophenol	ug/l	0.3	ND (0.13)	-	ND (0.13)	-	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.14)	-	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13) [b]
Benzo(a)anthracene	ug/l	0.1	ND (0.023)	-	ND (0.023)	-	ND (0.023)	ND (0.023)	ND (0.023)	**1.02**	-	ND (0.023)	ND (0.023)	ND (0.023)	**0.288** [a]
Benzo(a)pyrene	ug/l	0.1	ND (0.034)	-	ND (0.034)	-	ND (0.033)	ND (0.033)	ND (0.033)	**0.983**	-	ND (0.034)	ND (0.033)	ND (0.033)	**0.107**
Benzo(b)fluoranthene	ug/l	0.2	ND (0.044)	-	ND (0.044)	-	ND (0.043)	ND (0.043)	ND (0.043)	**1.32**	-	ND (0.045)	ND (0.043)	ND (0.043)	0.157
Benzo(k)fluoranthene	ug/l	0.5	ND (0.033)	-	ND (0.033)	-	ND (0.033)	ND (0.033)	ND (0.033)	0.363	-	ND (0.034)	ND (0.033)	ND (0.033)	0.0587 J
Dibenzo(a,h)anthracene	ug/l	0.3	ND (0.037)	-	ND (0.037)	-	ND (0.036)	ND (0.036)	ND (0.036)	0.173	-	ND (0.037)	ND (0.036)	ND (0.036)	ND (0.038)
Hexachlorobenzene	ug/l	0.02	ND (0.011)	-	ND (0.011)	-	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.012)	-	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.012)
Hexachlorobutadiene	ug/l	1	ND (0.018)	-	ND (0.018)	-	ND (0.018)	ND (0.018)	ND (0.018)	ND (0.019)	-	ND (0.018)	ND (0.018)	ND (0.018)	ND (0.019)
Indeno(1,2,3-cd)pyrene	ug/l	0.2	ND (0.038)	-	ND (0.038)	-	ND (0.038)	ND (0.038)	ND (0.038)	**0.771**	-	ND (0.039)	ND (0.038)	ND (0.038)	0.124
1,4-Dioxane	ug/l	0.4	ND (0.049)	-	ND (0.049)	-	0.204	0.246	**0.924**	-	-	-	-	-	-
GC/MS Semi-volatile TIC															
Total TIC, Semi-Volatile	ug/l	-	6.8 J	-	19.6 J	-	0	0	35 J	0	-	9.7 J	194.3 J	136.7 J	38.9 J
Total Alkanes	ug/l	-	0	-	0	-	0	0	0	0	-	0	0	0	0
GC Semi-volatiles (SW846 8081B)															
Aldrin	ug/l	0.04	ND (0.0061)	-	ND (0.0061)	-	ND (0.0040)	ND (0.0052)	ND (0.0026)	ND (0.0064)	-	ND (0.0040)	ND (0.0052)	ND (0.0052)	ND (0.0026)
alpha-BHC	ug/l	0.02	ND (0.0061)	-	ND (0.0061)	-	ND (0.0040)	ND (0.0052)	ND (0.0026)	ND (0.0064)	-	0.0064 J	ND (0.0052)	ND (0.0052)	ND (0.0026)
beta-BHC	ug/l	0.04	ND (0.0057)	-	ND (0.0057)	-	ND (0.0038)	ND (0.0080)	ND (0.0040)	ND (0.0061)	-	ND (0.0038)	ND (0.0080)	ND (0.0080)	ND (0.0040)
delta-BHC	ug/l	-	ND (0.0046)	-	ND (0.0046)	-	ND (0.0030)	ND (0.0066)	ND (0.0033)	ND (0.0049)	-	ND (0.0030)	ND (0.0066)	ND (0.0066)	ND (0.0033)
gamma-BHC (Lindane)	ug/l	0.03	ND (0.0028)	-	ND (0.0028)	-	ND (0.0019)	ND (0.0060)	ND (0.0030)	ND (0.0030)	-	ND (0.0019)	ND (0.0060)	ND (0.0060)	ND (0.0030)
alpha-Chlordane	ug/l	0.5	ND (0.0047)	-	ND (0.0047)	-	ND (0.0031)	ND (0.0049)	ND (0.0025)	ND (0.0049)	-	ND (0.0031)	ND (0.0049)	ND (0.0049)	ND (0.0025)
gamma-Chlordane	ug/l	0.5	ND (0.0046)	-	ND (0.0046)	-	ND (0.0031)	ND (0.0043)	ND (0.0021)	ND (0.0049)	-	ND (0.0031)	ND (0.0043)	ND (0.0043)	ND (0.0021)
Chlordane (alpha and gamma)	ug/l	0.5	ND (0.0046)	-	ND (0.0046)	-	ND (0.0031)	ND (0.0043)	ND (0.0021)	ND (0.0049)	-	ND (0.0031)	ND (0.0043)	ND (0.0043)	ND (0.0021)
Dieldrin	ug/l	0.03	ND (0.0036)	-	ND (0.0036)	-	ND (0.0024)	ND (0.0077)	ND (0.0038)	ND (0.0038)	-	ND (0.0024)	ND (0.0077)	ND (0.0077)	ND (0.0038)
4,4'-DDD	ug/l	0.1	ND (0.0038)	-	ND (0.0038)	-	ND (0.0025)	ND (0.0057)	ND (0.0029)	ND (0.0040)	-	ND (0.0025)	ND (0.0057)	ND (0.0057)	ND (0.0029)
4,4'-DDE	ug/l	0.1	ND (0.0062)	-	ND (0.0062)	-	ND (0.0041)	ND (0.0051)	ND (0.0025)	ND (0.0066)	-	ND (0.0041)	ND (0.0051)	ND (0.0051)	ND (0.0025)
4,4'-DDT	ug/l	0.1	ND (0.0050)	-	ND (0.0050)	-	ND (0.0033)	ND (0.0069)	ND (0.0034)	ND (0.0053)	-	ND (0.0033)	ND (0.0069)	ND (0.0069)	ND (0.0034)
Endrin	ug/l	2	ND (0.0051)	-	ND (0.0051)	-	ND (0.0034)	ND (0.0061)	ND (0.0030)	ND (0.0054)	-	ND (0.0034)	ND (0.0061)	ND (0.0061)	ND (0.0030)
Endosulfan sulfate	ug/l	40	ND (0.0053)	-	ND (0.0053)	-	ND (0.0035)	ND (0.0055)	ND (0.0027)	ND (0.0056)	-	ND (0.0035)	ND (0.0055)	ND (0.0055)	ND (0.0027)
Endrin aldehyde	ug/l	-	ND (0.0052)	-	ND (0.0052)	-	ND (0.0034)	ND (0.0067)	ND (0.0034)	ND (0.0055)	-	ND (0.0034)	ND (0.0067)	ND (0.0067)	ND (0.0034)
Endrin ketone	ug/l	-	ND (0.0051)	-	ND (0.0051)	-	ND (0.0034)	ND (0.0062)	ND (0.0031)	ND (0.0054)	-	ND (0.0034)	ND (0.0062)	ND (0.0062)	ND (0.0031)
Endosulfan-I	ug/l	40	ND (0.0050)	-	ND (0.0050)	-	ND (0.0033)	ND (0.0053)	ND (0.0026)	ND (0.0053)	-	ND (0.0033)	ND (0.0053)	ND (0.0053)	ND (0.0026)
Endosulfan-II	ug/l	40	ND (0.0043)	-	ND (0.0043)	-	ND (0.0029)	ND (0.0049)	ND (0.0024)	ND (0.0046)	-	ND (0.0029)	ND (0.0049)	ND (0.0049)	ND (0.0024)
Heptachlor	ug/l	0.05	ND (0.0038)	-	ND (0.0038)	-	ND (0.0025)	ND (0.0045)	ND (0.0022)	ND (0.0041)	-	ND (0.0025)	ND (0.0045)	ND (0.0045)	ND (0.0022)

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-8DR3							MW-9SR					
					DUPLICATE	DUPLICATE								DUPLICATE	
Lab Sample ID:			JC39631-7	JC39631-7R	JC39631-9	JC39631-9R	JC45784-7	JC51803-7	JC57765-4	JC39631-8	JC39631-8R	JC45784-8	JC51803-8	JC51803-9	JC57765-6
Date Sampled:			3/24/2017	3/24/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/24/2017	6/22/2017	9/26/2017	9/26/2017	12/20/2017
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Heptachlor epoxide	ug/l	0.2	ND (0.0066)	-	ND (0.0066)	-	ND (0.0044)	ND (0.0060)	ND (0.0030)	ND (0.0069)	-	ND (0.0044)	ND (0.0060)	ND (0.0060)	ND (0.0030)
Methoxychlor	ug/l	40	ND (0.0057)	-	ND (0.0057)	-	ND (0.0038)	ND (0.0067)	ND (0.0034)	ND (0.0060)	-	ND (0.0038)	ND (0.0067)	ND (0.0067)	ND (0.0034)
Toxaphene	ug/l	2	ND (0.19)	-	ND (0.19)	-	ND (0.12)	ND (0.16)	ND (0.080)	ND (0.20)	-	ND (0.12)	ND (0.16)	ND (0.16)	ND (0.080)
GC Semi-volatiles (SW846 8082A)															
Aroclor 1016	ug/l	0.5	ND (0.15)	-	ND (0.15)	-	ND (0.21)	ND (0.20)	ND (0.098)	ND (0.16)	-	ND (0.22)	ND (0.20)	ND (0.20)	ND (0.098)
Aroclor 1221	ug/l	0.5	ND (0.31)	-	ND (0.31)	-	ND (0.32)	ND (0.42)	ND (0.21)	ND (0.33)	-	ND (0.33)	ND (0.42)	ND (0.42)	ND (0.21)
Aroclor 1232	ug/l	0.5	ND (0.20)	-	ND (0.20)	-	ND (0.16)	ND (0.26)	ND (0.13)	ND (0.21)	-	ND (0.16)	ND (0.26)	ND (0.26)	ND (0.13)
Aroclor 1242	ug/l	0.5	ND (0.28)	-	ND (0.28)	-	ND (0.24)	ND (0.23)	ND (0.11)	ND (0.30)	-	ND (0.25)	ND (0.23)	ND (0.23)	ND (0.11)
Aroclor 1248	ug/l	0.5	ND (0.43)	-	ND (0.43)	-	ND (0.15)	ND (0.13)	ND (0.063)	ND (0.45)	-	ND (0.16)	ND (0.13)	ND (0.13)	ND (0.063)
Aroclor 1254	ug/l	0.5	ND (0.25)	-	ND (0.25)	-	ND (0.17)	ND (0.41)	ND (0.21)	ND (0.26)	-	ND (0.17)	ND (0.41)	ND (0.41)	ND (0.21)
Aroclor 1260	ug/l	0.5	ND (0.41)	-	ND (0.41)	-	ND (0.14)	ND (0.15)	ND (0.076)	ND (0.43)	-	ND (0.14)	ND (0.15)	ND (0.15)	ND (0.076)
Aroclor 1268	ug/l	-	ND (0.18)	-	ND (0.18)	-	ND (0.16)	ND (0.17)	ND (0.087)	ND (0.19)	-	ND (0.16)	ND (0.17)	ND (0.17)	ND (0.087)
Aroclor 1262	ug/l	-	ND (0.20)	-	ND (0.20)	-	ND (0.15)	ND (0.19)	ND (0.097)	ND (0.21)	-	ND (0.16)	ND (0.19)	ND (0.19)	ND (0.097)
Metals Analysis															
Aluminum	ug/l	200	64.6 B	-	43.4 B	-	96.6 B	92.2 B	**561**	**11300 [b]**	-	33 U	33 U	33 U	**214**
Antimony	ug/l	6	3.3 U	-	3.3 U	-	4.3 U	4.3 U	4.3 U	**10.8 B [b]**	-	4.3 U	4.3 U	4.3 U	4.6 B
Arsenic	ug/l	3	**6.8**	-	**6.4**	-	**6.6**	**6.8**	**4.1**	**25.4 [b]**	-	2.7 U	2.7 U	**5**	**3.1**
Barium	ug/l	6000	**7560**	-	**7310**	-	**7920**	**7970**	**6250**	515 [b]	-	440	592	581	465
Beryllium	ug/l	1	0.25 U	-	0.25 U	-	0.40 U	0.40 U	0.40 U	0.50 U [b]	-	0.40 U	0.40 U	0.40 U	0.40 U
Cadmium	ug/l	4	1.4 B	1.7 B	1.5 B	-	0.70 U	0.70 U	0.70 U	**5.4 B [b]**	**5.8 B [b]**	0.70 U	0.70 U	0.70 U	1.4 B
Calcium	ug/l	-	145000	-	143000	-	149000	138000	118000	240000 [b]	-	262000	243000	260000	256000
Chromium	ug/l	70	2.0 B	-	1.7 B	-	1.4 B	1.6 B	8.9 B	**352 [b]**	-	8.6 B	11.3	13.7	14.8
Cobalt	ug/l	100	0.69 U	-	0.69 U	-	7.2 U [d]	2.4 B	3.6 U [e]	25.0 B [b]	-	1.8 B	1.7 B	1.7 B	1.8 B
Copper	ug/l	1300	7.2 B	-	5.9 B	-	3.8 B	4.9 B	10.4	423 [b]	-	8.4 B	3.2 U	3.2 B	15.6
Iron	ug/l	300	**9890**	-	**9720**	-	**10100**	**9100**	**8710**	**44600 [b]**	-	**3340**	**779**	**916**	**1860**
Lead	ug/l	5	2.3 U	-	2.3 U	-	26 U [d]	2.6 U	13 U [e]	**418 [b]**	-	2.6 U	2.6 B	2.6 U	**9.7**
Magnesium	ug/l	-	242000	-	239000	-	254000	241000	249000	107000 [b]	-	118000	139000	128000	126000
Manganese	ug/l	50	**219**	-	**214**	-	**208**	**185**	**221**	**597 [b]**	-	**4590**	**831**	**1030**	**814**
Mercury	ug/l	2	0.14 U [b]	-	0.14 U [b]	-	0.083 U	0.083 U	0.083 U	1.5 [b]	-	0.083 U	0.11 B	0.083 U	0.083 U
Nickel	ug/l	100	3.3 B	-	3.6 B	-	13 U [d]	5.3 B	9.7 B [e]	**113 [b]**	-	9.0 B	4.3 B	4.4 B	8.9 B
Potassium	ug/l	-	62700	-	61400	-	74800	101000	149000	64900 [b]	-	77200	81900	86400	84000
Selenium	ug/l	40	4.1 U	-	4.1 U	-	6.6 B	6.6 U	6.6 U	8.1 U [b]	-	8.4 B	6.6 U	6.6 U	6.6 U
Silver	ug/l	40	0.88 U	-	0.88 U	-	3.1 U	3.1 U	3.1 U	3.6 B [b]	-	3.1 U	3.1 U	3.1 U	3.1 U
Sodium	ug/l	50000	**2240000**	-	**2140000**	-	**2160000**	**2190000**	**2150000**	**953000**	-	**1040000**	**1200000**	**1110000**	**938000**
Thallium	ug/l	2	1.9 U	-	19 U [d]	0.97 U [d]	16 U [d]	1.7 B	8.2 U [e]	3.8 U [b]	0.97 U [d]	1.6 U	1.6 U	1.6 U	1.6 U
Vanadium	ug/l	-	0.66 U	-	0.66 U	-	1.3 U	1.3 U	1.7 B	60.8 B [b]	-	6.4 B	4.0 B	4.6 B	5.3 B

Client Sample ID:		Ground Water Quality Standards (GWQS)	MW-8DR3							MW-9SR					
					DUPLICATE	DUPLICATE								DUPLICATE	
Lab Sample ID:			**JC39631-7**	**JC39631-7R**	**JC39631-9**	**JC39631-9R**	**JC45784-7**	**JC51803-7**	**JC57765-4**	**JC39631-8**	**JC39631-8R**	**JC45784-8**	**JC51803-8**	**JC51803-9**	**JC57765-6**
Date Sampled:			**3/24/2017**	**3/24/2017**	**3/24/2017**	**3/24/2017**	**6/22/2017**	**9/26/2017**	**12/20/2017**	**3/24/2017**	**3/24/2017**	**6/22/2017**	**9/26/2017**	**9/26/2017**	**12/20/2017**
Matrix:			**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**	**Ground Water**
Parameters	**Units**		**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
Zinc	ug/l	2000	2.2 B	-	2.3 B	-	4.0 U	4.0 U	4.3 B	408 [b]	-	4.0 U	4.0 U	4.0 U	12.4 B
General Chemistry															
Solids, Total Suspended	mg/l	-	32.2	-	33.8	-	33.1	27.7	59.2	95	-	13	3.7 B	2.3 B	17.5
Field Data															
Turbidity	NTU	-	<0.10 [e]	-	<0.10 [e]	-	0	0	55.3	154 [e]	-	37.5	0	-	25
Depth To H2O, Top Casing	feet	-	16.98	-	16.98	-	16.39	16.31	16.75	9.14	-	8.95	7.1	-	8.9
Specific Conductivity (Field)	umhos/cm	-	12500 [e]	-	12500 [e]	-	11600	12000	13300	6930 [e]	-	6100	6420	-	4520
pH (Field)	su	6.5-8.5	**6.13** [e]	-	**6.13** [e]	-	**5.84**	6.99	7.26	7.38 [e]	-	**6.27**	**5.74**	-	6.54
Oxygen, Dissolved (Field)	mg/l	-	0.580 [e]	-	0.580 [e]	-	1.95	0.15	0	1.57 [e]	-	0.06	0.72	-	0
Dry		-	-	-	-	-	-	-	-	-	-	-	-	-	-

Client Sample ID:		Ground Water Quality Standards (GWQS)	FIELD BLANK					TRIP BLANK				
Lab Sample ID:			JC39631-10	JC39743-4	JC45784-10	JC51803-10	JC57765-8	JC39631-11	JC39743-5	JC45784-11	JC51803-11	JC57765-9
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Field Blank Water	Field Blank Water	Field Blank Water	Field Blank Water	Field Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
GC/MS Volatiles (SW846 8260C)												
Acetone	ug/l	6000	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Benzene	ug/l	1	ND (0.14)	ND (0.14)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.14)	ND (0.14)	ND (0.17)	ND (0.17)	ND (0.17)
Bromochloromethane	ug/l	-	ND (0.46)	ND (0.46)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.46)	ND (0.46)	ND (0.38)	ND (0.38)	ND (0.38)
Bromodichloromethane	ug/l	1	ND (0.55)	ND (0.55)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.55)	ND (0.55)	ND (0.22)	ND (0.22)	ND (0.22)
Bromoform	ug/l	4	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.42)	ND (0.42)
Bromomethane	ug/l	10	ND (0.46)	ND (0.46)	ND (1.4)	ND (1.4) [b]	ND (1.4)	ND (0.46)	ND (0.46)	ND (1.4)	ND (1.4) [b]	ND (1.4)
2-Butanone (MEK)	ug/l	300	ND (1.9)	ND (1.9)	ND (4.8)	ND (4.8)	ND (4.8)	ND (1.9)	ND (1.9)	ND (4.8)	ND (4.8)	ND (4.8)
Carbon disulfide	ug/l	700	ND (0.33)	ND (0.33)	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.33)	ND (0.33)	ND (0.23)	ND (0.23)	ND (0.50)
Carbon tetrachloride	ug/l	1	ND (0.54)	ND (0.54)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.54)	ND (0.54)	ND (0.34)	ND (0.34)	ND (0.34)
Chlorobenzene	ug/l	50	ND (0.17)	ND (0.17)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.17)	ND (0.17)	ND (0.24)	ND (0.24)	ND (0.24)
Chloroethane	ug/l	5	ND (0.44)	ND (0.44)	ND (0.59)	ND (0.59) [b]	ND (0.59)	ND (0.44)	ND (0.44)	ND (0.59)	ND (0.59) [b]	ND (0.59)
Chloroform	ug/l	70	ND (0.23)	ND (0.23)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.23)	ND (0.23)	ND (0.29)	ND (0.29)	ND (0.29)
Chloromethane	ug/l	-	ND (0.96)	ND (0.96)	ND (0.53)	ND (0.53) [b]	ND (0.53)	ND (0.96)	ND (0.96)	ND (0.53)	ND (0.53) [b]	ND (0.53)
Cyclohexane	ug/l	-	ND (0.73)	ND (0.73)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.73)	ND (0.73)	ND (0.63)	ND (0.63)	ND (0.63)
1,2-Dibromo-3-chloropropane	ug/l	0.02	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)
Dibromochloromethane	ug/l	1	ND (0.23)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.23)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.16)
1,2-Dibromoethane	ug/l	0.03	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.21)
1,2-Dichlorobenzene	ug/l	600	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.50)	ND (0.50)
1,3-Dichlorobenzene	ug/l	600	ND (0.19)	ND (0.19)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.19)	ND (0.19)	ND (0.50)	ND (0.50)	ND (0.50)
1,4-Dichlorobenzene	ug/l	75	ND (0.21)	ND (0.21)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.21)	ND (0.21)	ND (0.50)	ND (0.50)	ND (0.50)
Dichlorodifluoromethane	ug/l	1000	ND (0.70)	ND (0.70)	ND (1.9)	ND (1.9)	ND (1.9) [b]	ND (0.70)	ND (0.70)	ND (1.9)	ND (1.9)	ND (1.9) [b]
1,1-Dichloroethane	ug/l	50	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
1,2-Dichloroethane	ug/l	2	ND (0.39)	ND (0.39)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.39)	ND (0.39)	ND (0.20)	ND (0.20)	ND (0.20)
1,1-Dichloroethene	ug/l	1	ND (0.20)	ND (0.20)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.20)	ND (0.20)	ND (0.47)	ND (0.47)	ND (0.47)
cis-1,2-Dichloroethene	ug/l	70	ND (0.31)	ND (0.31)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.31)	ND (0.31)	ND (0.50)	ND (0.50)	ND (0.50)
trans-1,2-Dichloroethene	ug/l	100	ND (0.36)	ND (0.36)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.36)	ND (0.36)	ND (0.40)	ND (0.40)	ND (0.40)
1,2-Dichloropropane	ug/l	1	ND (0.33)	ND (0.33)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.33)	ND (0.33)	ND (0.24)	ND (0.24)	ND (0.24)
cis-1,3-Dichloropropene	ug/l	-	ND (0.19)	ND (0.19)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.19)	ND (0.19)	ND (0.25)	ND (0.25)	ND (0.25)
trans-1,3-Dichloropropene	ug/l	-	ND (0.26)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.26)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.22)
Ethylbenzene	ug/l	700	ND (0.20)	ND (0.20)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.20)	ND (0.20)	ND (0.22)	ND (0.22)	ND (0.22)
Freon 113	ug/l	20000	ND (1.2) [a]	ND (1.2) [a]	ND (1.2)	ND (1.2)	ND (1.2) [b]	ND (1.2) [a]	ND (1.2) [a]	ND (1.2)	ND (1.2)	ND (1.2) [b]
2-Hexanone	ug/l	300	ND (1.5)	ND (1.5)	ND (3.3)	ND (3.3)	ND (3.3)	ND (1.5)	ND (1.5)	ND (3.3)	ND (3.3)	ND (3.3)
Isopropylbenzene	ug/l	700	ND (0.16)	ND (0.16)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.16)	ND (0.16)	ND (0.25)	ND (0.25)	ND (0.25)
Methyl Acetate	ug/l	7000	ND (1.5)	ND (1.5)	ND (3.1)	ND (3.1)	ND (3.1)	ND (1.5)	ND (1.5)	ND (3.1)	ND (3.1)	ND (3.1)
Methylcyclohexane	ug/l	-	ND (0.78)	ND (0.78)	ND (1.8)	ND (1.8)	ND (1.8)	ND (0.78)	ND (0.78)	ND (1.8)	ND (1.8)	ND (1.8)
Methyl Tert Butyl Ether	ug/l	70	ND (0.34)	ND (0.34)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.34)	ND (0.34)	ND (0.25)	ND (0.25)	ND (0.25)
4-Methyl-2-pentanone(MIBK)	ug/l	-	ND (1.2)	ND (1.2)	ND (3.0)	ND (3.0)	ND (3.0)	ND (1.2)	ND (1.2)	ND (3.0)	ND (3.0)	ND (3.0)
Methylene chloride	ug/l	3	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Styrene	ug/l	100	ND (0.27)	ND (0.27)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.27)	ND (0.27)	ND (0.24)	ND (0.24)	ND (0.24)
1,1,2,2-Tetrachloroethane	ug/l	1	ND (0.39)	ND (0.39)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.39)	ND (0.39)	ND (0.17)	ND (0.17)	ND (0.17)
Tetrachloroethene	ug/l	1	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.50)	ND (0.50)
Toluene	ug/l	600	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.25)	ND (0.25)
1,2,3-Trichlorobenzene	ug/l	-	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,2,4-Trichlorobenzene	ug/l	9	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)

Client Sample ID:		Ground Water Quality Standards (GWQS)	FIELD BLANK					TRIP BLANK				
Lab Sample ID:			JC39631-10	JC39743-4	JC45784-10	JC51803-10	JC57765-8	JC39631-11	JC39743-5	JC45784-11	JC51803-11	JC57765-9
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Field Blank Water	Field Blank Water	Field Blank Water	Field Blank Water	Field Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
1,1,1-Trichloroethane	ug/l	30	ND (0.22)	ND (0.22)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.25)	ND (0.25)	ND (0.25)
1,1,2-Trichloroethane	ug/l	3	ND (0.28)	ND (0.28)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.28)	ND (0.28)	ND (0.24)	ND (0.24)	ND (0.24)
Trichloroethene	ug/l	1	ND (0.26)	ND (0.26)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.26)	ND (0.26)	ND (0.27)	ND (0.27)	ND (0.27)
Trichlorofluoromethane	ug/l	2000	ND (0.58)	ND (0.58)	ND (0.60)	ND (0.60)	ND (0.60) [b]	ND (0.58)	ND (0.58)	ND (0.60)	ND (0.60)	ND (0.60) [b]
Vinyl chloride	ug/l	1	ND (0.33)	ND (0.33)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.33)	ND (0.33)	ND (0.62)	ND (0.62)	ND (0.62)
m,p-Xylene	ug/l	-	ND (0.42)	ND (0.42)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.42)	ND (0.42)	ND (0.43)	ND (0.43)	ND (0.43)
o-Xylene	ug/l	-	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.22)
Xylene (total)	ug/l	1000	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.22)
GC/MS Volatile TIC												
Total TIC, Volatile	ug/l	-	0	0	0	0	0	0	0	0	0	0
Total Alkanes	ug/l	-	0	0	0	0	0	0	0	0	0	0
GC/MS Semi-volatiles (SW846												
2-Chlorophenol	ug/l	40	ND (0.83)	ND (0.82)	ND (0.84)	ND (0.82)	ND (0.82)	-	-	-	-	-
4-Chloro-3-methyl phenol	ug/l	100	ND (0.90)	ND (0.89)	ND (0.91)	ND (0.89)	ND (0.89)	-	-	-	-	-
2,4-Dichlorophenol	ug/l	20	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	-	-	-	-	-
2,4-Dimethylphenol	ug/l	100	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.4)	ND (2.4)	-	-	-	-	-
2,4-Dinitrophenol	ug/l	40	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6) [b]	ND (1.6) [b]	-	-	-	-	-
2-Methylphenol	ug/l	50	ND (0.90)	ND (0.89)	ND (0.91)	ND (0.89)	ND (0.89)	-	-	-	-	-
3&4-Methylphenol	ug/l	50	ND (0.89)	ND (0.88)	ND (0.90)	ND (0.88)	ND (0.88)	-	-	-	-	-
2-Nitrophenol	ug/l	-	ND (0.97)	ND (0.96)	ND (0.98)	ND (0.96)	ND (0.96) [b]	-	-	-	-	-
4-Nitrophenol	ug/l	-	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	-	-	-	-	-
Phenol	ug/l	2000	ND (0.40)	ND (0.39)	ND (0.40)	ND (0.39)	ND (0.39)	-	-	-	-	-
2,3,4,6-Tetrachlorophenol	ug/l	200	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	-	-	-	-	-
2,4,5-Trichlorophenol	ug/l	700	ND (1.3)	ND (1.3)	ND (1.4)	ND (1.3)	ND (1.3)	-	-	-	-	-
2,4,6-Trichlorophenol	ug/l	20	ND (0.93)	ND (0.92)	ND (0.95)	ND (0.92)	ND (0.92)	-	-	-	-	-
Acenaphthene	ug/l	400	ND (0.19)	ND (0.19)	ND (0.20)	ND (0.19)	ND (0.19)	-	-	-	-	-
Acenaphthylene	ug/l	100	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	-	-	-	-	-
Acetophenone	ug/l	700	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	-	-	-	-	-
Anthracene	ug/l	2000	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.21)	ND (0.21)	-	-	-	-	-
Atrazine	ug/l	3	ND (0.45)	ND (0.45)	ND (0.46)	ND (0.45)	ND (0.45) [b]	-	-	-	-	-
Benzaldehyde	ug/l	-	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29) [d]	ND (0.29)	-	-	-	-	-
Benzo(g,h,i)perylene	ug/l	100	ND (0.34)	ND (0.34)	ND (0.35)	ND (0.34)	ND (0.34)	-	-	-	-	-
4-Bromophenyl phenyl ether	ug/l	-	ND (0.41)	ND (0.40)	ND (0.41)	ND (0.40)	ND (0.40)	-	-	-	-	-
Butyl benzyl phthalate	ug/l	100	ND (0.46)	ND (0.46)	ND (0.47)	ND (0.46) [b]	ND (0.46)	-	-	-	-	-
1,1'-Biphenyl	ug/l	400	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.21)	ND (0.21)	-	-	-	-	-
2-Chloronaphthalene	ug/l	600	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	-	-	-	-	-
4-Chloroaniline	ug/l	30	ND (0.34)	ND (0.34)	ND (0.35)	ND (0.34)	ND (0.34)	-	-	-	-	-
Carbazole	ug/l	-	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	-	-	-	-	-
Caprolactam	ug/l	5000	ND (0.66)	ND (0.65)	ND (0.67)	ND (0.65) [b]	ND (0.65)	-	-	-	-	-
Chrysene	ug/l	5	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	-	-
bis(2-Chloroethoxy)methane	ug/l	-	ND (0.28)	ND (0.28)	ND (0.29)	ND (0.28)	ND (0.28)	-	-	-	-	-

Client Sample ID:		Ground Water Quality Standards (GWQS)	FIELD BLANK					TRIP BLANK				
Lab Sample ID:			JC39631-10	JC39743-4	JC45784-10	JC51803-10	JC57765-8	JC39631-11	JC39743-5	JC45784-11	JC51803-11	JC57765-9
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Field Blank Water	Field Blank Water	Field Blank Water	Field Blank Water	Field Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
bis(2-Chloroethyl)ether	ug/l	7	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	-	-	-	-	-
bis(2-Chloroisopropyl)ether	ug/l	300	ND (0.41)	ND (0.40)	ND (0.41)	ND (0.40)	ND (0.40)	-	-	-	-	-
4-Chlorophenyl phenyl ether	ug/l	-	ND (0.37)	ND (0.37)	ND (0.38)	ND (0.37)	ND (0.37)	-	-	-	-	-
2,4-Dinitrotoluene	ug/l	-	ND (0.56)	ND (0.55)	ND (0.57)	ND (0.55)	ND (0.55)	-	-	-	-	-
2,6-Dinitrotoluene	ug/l	-	ND (0.48)	ND (0.48)	ND (0.49)	ND (0.48)	ND (0.48)	-	-	-	-	-
3,3'-Dichlorobenzidine	ug/l	30	ND (0.51)	ND (0.51)	ND (0.52)	ND (0.51)	ND (0.51)	-	-	-	-	-
1,4-Dioxane	ug/l	0.4	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	ug/l	-	ND (0.22)	ND (0.22)	ND (0.23)	ND (0.22)	ND (0.22)	-	-	-	-	-
Di-n-butyl phthalate	ug/l	700	ND (0.50)	ND (0.50)	ND (0.51) [a]	1.0 J	ND (0.50)	-	-	-	-	-
Di-n-octyl phthalate	ug/l	100	ND (0.24)	ND (0.23)	ND (0.24)	ND (0.23)	ND (0.23) [b]	-	-	-	-	-
Diethyl phthalate	ug/l	6000	ND (0.26)	ND (0.26)	ND (0.27)	ND (0.26)	ND (0.26)	-	-	-	-	-
Dimethyl phthalate	ug/l	100	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	ug/l	3	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	-	-	-	-	-
Fluoranthene	ug/l	300	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	-	-	-	-	-
Fluorene	ug/l	300	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.17)	ND (0.17)	-	-	-	-	-
Hexachlorocyclopentadiene	ug/l	40	ND (2.8)	ND (2.8)	ND (2.9)	ND (2.8)	ND (2.8)	-	-	-	-	-
Hexachloroethane	ug/l	7	ND (0.39)	ND (0.39)	ND (0.40)	ND (0.39)	ND (0.39)	-	-	-	-	-
Isophorone	ug/l	40	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	-	-	-	-	-
2-Methylnaphthalene	ug/l	30	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.21)	ND (0.21)	-	-	-	-	-
2-Nitroaniline	ug/l	-	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28) [b]	ND (0.28)	-	-	-	-	-
3-Nitroaniline	ug/l	-	ND (0.39)	ND (0.39)	ND (0.40)	ND (0.39)	ND (0.39)	-	-	-	-	-
4-Nitroaniline	ug/l	-	ND (0.44)	ND (0.44)	ND (0.45)	ND (0.44)	ND (0.44)	-	-	-	-	-
Naphthalene	ug/l	300	ND (0.23)	ND (0.23)	ND (0.24)	ND (0.23)	ND (0.23)	-	-	-	-	-
Nitrobenzene	ug/l	6	ND (0.65)	ND (0.64)	ND (0.66)	ND (0.64)	ND (0.64)	-	-	-	-	-
N-Nitroso-di-n-propylamine	ug/l	10	ND (0.49)	ND (0.48)	ND (0.49)	ND (0.48)	ND (0.48)	-	-	-	-	-
N-Nitrosodiphenylamine	ug/l	10	ND (0.22)	ND (0.22)	ND (0.23)	ND (0.22)	ND (0.22)	-	-	-	-	-
Phenanthrene	ug/l	-	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	-	-	-	-	-
Pyrene	ug/l	200	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	-	-	-	-	-
1,2,4,5-Tetrachlorobenzene	ug/l	-	ND (0.37)	ND (0.37)	ND (0.38)	ND (0.37)	ND (0.37)	-	-	-	-	-
GC/MS Semi-volatiles (SW846												
4,6-Dinitro-o-cresol	ug/l	1	ND (0.15)	ND (0.15)	ND (0.16)	ND (0.15)	ND (0.15) [b]	-	-	-	-	-
Pentachlorophenol	ug/l	0.3	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13) [b]	-	-	-	-	-
Benzo(a)anthracene	ug/l	0.1	ND (0.023)	ND (0.023)	**0.327**	ND (0.023)	ND (0.023) [b]	-	-	-	-	-
Benzo(a)pyrene	ug/l	0.1	ND (0.034)	ND (0.033)	**0.185**	ND (0.033)	ND (0.033)	-	-	-	-	-
Benzo(b)fluoranthene	ug/l	0.2	ND (0.044)	ND (0.043)	0.173	ND (0.043)	ND (0.043)	-	-	-	-	-
Benzo(k)fluoranthene	ug/l	0.5	ND (0.033)	ND (0.033)	0.11	ND (0.033)	ND (0.033)	-	-	-	-	-
Dibenzo(a,h)anthracene	ug/l	0.3	ND (0.037)	ND (0.036)	ND (0.037)	ND (0.036)	ND (0.036)	-	-	-	-	-
Hexachlorobenzene	ug/l	0.02	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	-	-	-	-	-
Hexachlorobutadiene	ug/l	1	ND (0.018)	ND (0.018)	ND (0.018)	ND (0.018)	ND (0.018)	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	ug/l	0.2	ND (0.038)	ND (0.038)	0.11	ND (0.038)	ND (0.038)	-	-	-	-	-
1,4-Dioxane	ug/l	0.4	ND (0.049)	ND (0.049)	ND (0.050)	ND (0.049)	ND (0.049) [b]	-	-	-	-	-
GC/MS Semi-volatile TIC												

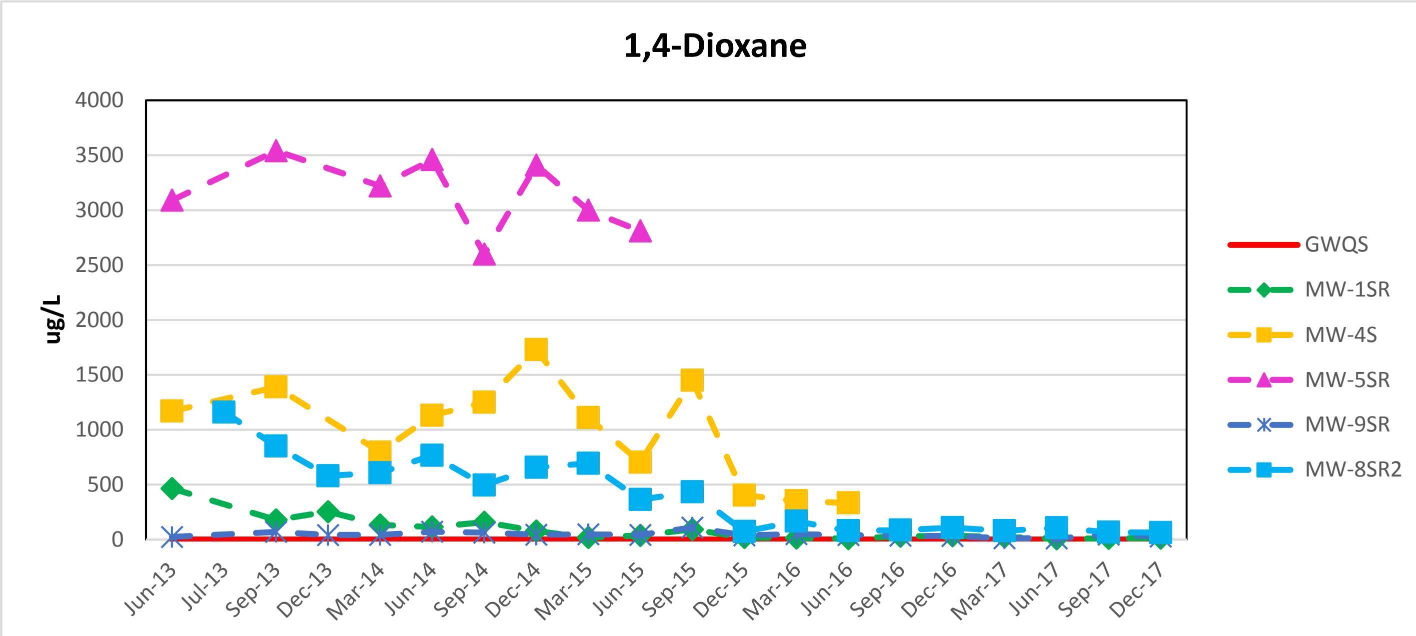
Client Sample ID:		Ground Water Quality Standards (GWQS)	FIELD BLANK					TRIP BLANK				
Lab Sample ID:			JC39631-10	JC39743-4	JC45784-10	JC51803-10	JC57765-8	JC39631-11	JC39743-5	JC45784-11	JC51803-11	JC57765-9
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Field Blank Water	Field Blank Water	Field Blank Water	Field Blank Water	Field Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Total TIC, Semi-Volatile	ug/l	-	0	0	0	0	0	-	-	-	-	-
Total Alkanes	ug/l	-	0	0	0	0	0	-	-	-	-	-
GC Semi-volatiles (SW846												
Aldrin	ug/l	0.04	ND (0.0062)	ND (0.0061)	ND (0.0040)	ND (0.0052)	ND (0.0026)	-	-	-	-	-
alpha-BHC	ug/l	0.02	ND (0.0061)	ND (0.0061)	ND (0.0040)	ND (0.0052)	ND (0.0026)	-	-	-	-	-
beta-BHC	ug/l	0.04	ND (0.0058)	ND (0.0057)	ND (0.0038)	ND (0.0080)	ND (0.0040)	-	-	-	-	-
delta-BHC	ug/l	-	ND (0.0047)	ND (0.0046)	ND (0.0030)	ND (0.0066)	ND (0.0033)	-	-	-	-	-
gamma-BHC (Lindane)	ug/l	0.03	ND (0.0028)	ND (0.0028)	ND (0.0019)	ND (0.0060)	ND (0.0030)	-	-	-	-	-
alpha-Chlordane	ug/l	0.5	ND (0.0047)	ND (0.0047)	ND (0.0031)	ND (0.0049)	ND (0.0025)	-	-	-	-	-
gamma-Chlordane	ug/l	0.5	ND (0.0047)	ND (0.0046)	ND (0.0031)	ND (0.0043)	ND (0.0021)	-	-	-	-	-
Chlordane (alpha and gamma)	ug/l	0.5	ND (0.0047)	ND (0.0046)	ND (0.0031)	ND (0.0043)	ND (0.0021)	-	-	-	-	-
Dieldrin	ug/l	0.03	ND (0.0037)	ND (0.0036)	ND (0.0024)	ND (0.0077)	ND (0.0038)	-	-	-	-	-
4,4'-DDD	ug/l	0.1	ND (0.0039)	ND (0.0038)	ND (0.0025)	ND (0.0057)	ND (0.0029)	-	-	-	-	-
4,4'-DDE	ug/l	0.1	ND (0.0063)	ND (0.0062)	ND (0.0041)	ND (0.0051)	ND (0.0025)	-	-	-	-	-
4,4'-DDT	ug/l	0.1	ND (0.0051)	ND (0.0050)	ND (0.0033)	ND (0.0069)	ND (0.0034)	-	-	-	-	-
Endrin	ug/l	2	ND (0.0051)	ND (0.0051)	ND (0.0034)	ND (0.0061)	ND (0.0030)	-	-	-	-	-
Endosulfan sulfate	ug/l	40	ND (0.0054)	ND (0.0053)	ND (0.0035)	ND (0.0055)	ND (0.0027)	-	-	-	-	-
Endrin aldehyde	ug/l	-	ND (0.0052)	ND (0.0052)	ND (0.0034)	ND (0.0067)	ND (0.0034)	-	-	-	-	-
Endrin ketone	ug/l	-	ND (0.0052)	ND (0.0051)	ND (0.0034)	ND (0.0062)	ND (0.0031)	-	-	-	-	-
Endosulfan-I	ug/l	40	ND (0.0051)	ND (0.0050)	ND (0.0033)	ND (0.0053)	ND (0.0026)	-	-	-	-	-
Endosulfan-II	ug/l	40	ND (0.0044)	ND (0.0043)	ND (0.0029)	ND (0.0049)	ND (0.0024)	-	-	-	-	-
Heptachlor	ug/l	0.05	ND (0.0039)	ND (0.0038)	ND (0.0025)	ND (0.0045)	ND (0.0022)	-	-	-	-	-
Heptachlor epoxide	ug/l	0.2	ND (0.0067)	ND (0.0066)	ND (0.0044)	ND (0.0060)	ND (0.0030)	-	-	-	-	-
Methoxychlor	ug/l	40	ND (0.0058)	ND (0.0057)	ND (0.0038)	ND (0.0067)	ND (0.0034)	-	-	-	-	-
Toxaphene	ug/l	2	ND (0.19)	ND (0.19)	ND (0.12)	ND (0.16)	ND (0.080)	-	-	-	-	-
GC Semi-volatiles (SW846												
Aroclor 1016	ug/l	0.5	ND (0.15)	ND (0.15)	ND (0.21)	ND (0.20)	ND (0.098)	-	-	-	-	-
Aroclor 1221	ug/l	0.5	ND (0.31)	ND (0.31)	ND (0.32)	ND (0.42)	ND (0.21)	-	-	-	-	-
Aroclor 1232	ug/l	0.5	ND (0.20)	ND (0.20)	ND (0.16)	ND (0.26)	ND (0.13)	-	-	-	-	-
Aroclor 1242	ug/l	0.5	ND (0.28)	ND (0.28)	ND (0.24)	ND (0.23)	ND (0.11)	-	-	-	-	-
Aroclor 1248	ug/l	0.5	ND (0.43)	ND (0.43)	ND (0.15)	ND (0.13)	ND (0.063)	-	-	-	-	-
Aroclor 1254	ug/l	0.5	ND (0.25)	ND (0.25)	ND (0.17)	ND (0.41)	ND (0.21)	-	-	-	-	-
Aroclor 1260	ug/l	0.5	ND (0.41)	ND (0.41)	ND (0.14)	ND (0.15)	ND (0.076)	-	-	-	-	-
Aroclor 1268	ug/l	-	ND (0.18)	ND (0.18)	ND (0.16)	ND (0.17)	ND (0.087)	-	-	-	-	-
Aroclor 1262	ug/l	-	ND (0.20)	ND (0.20)	ND (0.15)	ND (0.19)	ND (0.097)	-	-	-	-	-
Metals Analysis												
Aluminum	ug/l	200	24.7 B	23.7 B	33 U	33 U	33 U	-	-	-	-	-
Antimony	ug/l	6	3.3 U	3.3 U	4.3 U	4.3 U	4.3 U	-	-	-	-	-
Arsenic	ug/l	3	2.2 U	2.2 U	2.7 U	2.7 U	2.7 U	-	-	-	-	-
Barium	ug/l	6000	1.1 B	1.5 B	1.3 U	1.3 U	3.5 B	-	-	-	-	-
Beryllium	ug/l	1	0.25 U	0.25 U	0.40 U	0.40 U	0.40 U	-	-	-	-	-

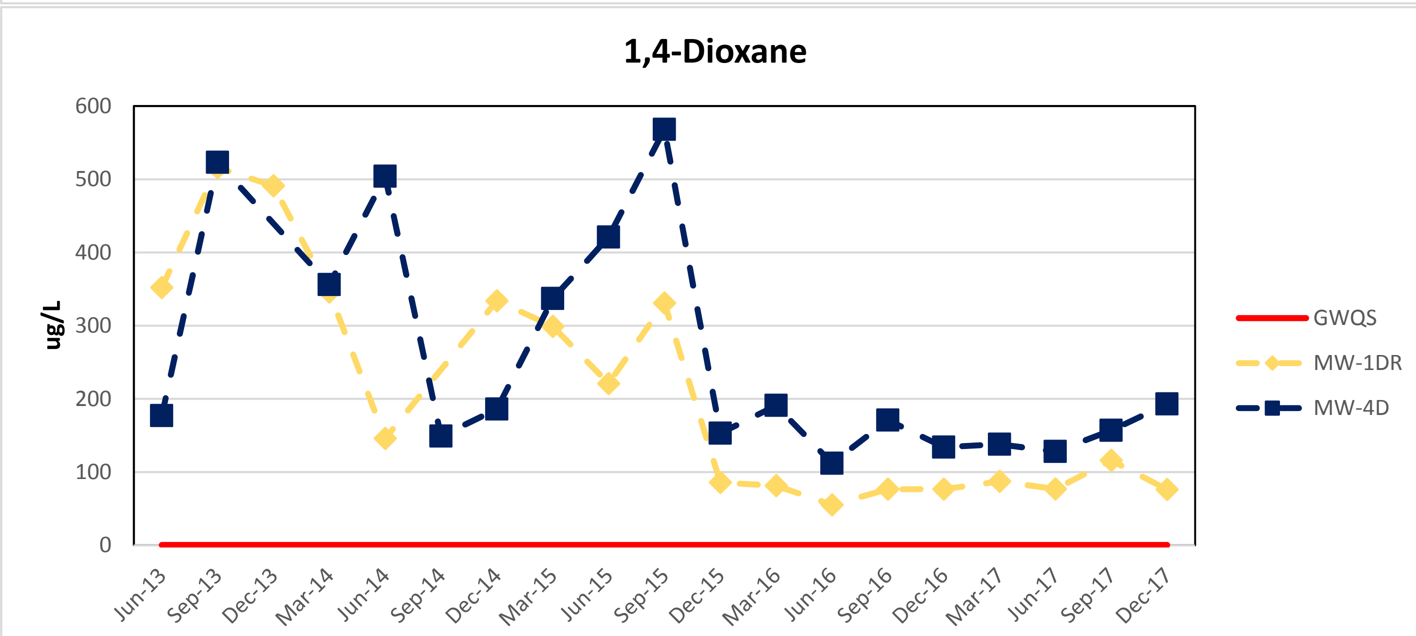
Client Sample ID:		Ground Water Quality Standards (GWQS)	FIELD BLANK					TRIP BLANK				
Lab Sample ID:			JC39631-10	JC39743-4	JC45784-10	JC51803-10	JC57765-8	JC39631-11	JC39743-5	JC45784-11	JC51803-11	JC57765-9
Date Sampled:			3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017	3/24/2017	3/27/2017	6/22/2017	9/26/2017	12/20/2017
Matrix:			Field Blank Water	Field Blank Water	Field Blank Water	Field Blank Water	Field Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water
Parameters	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Cadmium	ug/l	4	0.40 U	0.40 U	0.70 U	0.70 U	0.70 U	-	-	-	-	-
Calcium	ug/l	-	33.1 B	33 U	29.4 B	29 U	98.2 B	-	-	-	-	-
Chromium	ug/l	70	0.81 U	0.81 U	0.85 U	0.85 U	0.85 U	-	-	-	-	-
Cobalt	ug/l	100	0.69 U	0.69 U	0.72 U	0.72 U	0.72 U	-	-	-	-	-
Copper	ug/l	1300	4.2 B	2.4 U	3.2 U	3.2 U	3.2 U	-	-	-	-	-
Iron	ug/l	300	12 U	12 U	32 U	32 U	32 U	-	-	-	-	-
Lead	ug/l	5	2.3 U	2.3 U	2.6 U	2.6 U	2.6 U	-	-	-	-	-
Magnesium	ug/l	-	85 U	85 U	64 U	64 U	64 U	-	-	-	-	-
Manganese	ug/l	50	0.39 U	0.39 U	0.42 U	0.42 U	0.90 B	-	-	-	-	-
Mercury	ug/l	2	0.047 U	0.047 U	0.083 U	0.083 U	0.083 U	-	-	-	-	-
Nickel	ug/l	100	0.76 U	0.76 U	1.3 B	1.3 U	2.6 B	-	-	-	-	-
Potassium	ug/l	-	216 B	353 B	230 U	230 U	230 U	-	-	-	-	-
Selenium	ug/l	40	4.1 U	4.1 U	6.6 U	6.6 U	6.6 U	-	-	-	-	-
Silver	ug/l	40	0.88 U	0.88 U	3.1 U	3.1 U	3.1 U	-	-	-	-	-
Sodium	ug/l	50000	262 B	1030 B	130 U	182 B	227 B	-	-	-	-	-
Thallium	ug/l	2	1.9 U	1.9 U	1.6 U	1.6 U	1.6 U	-	-	-	-	-
Vanadium	ug/l	-	0.66 U	0.66 U	1.3 U	1.3 U	1.3 U	-	-	-	-	-
Zinc	ug/l	2000	1.5 B	1.4 B	4.0 U	4.0 U	4.0 U	-	-	-	-	-
General Chemistry												
Solids, Total Suspended	mg/l	-	0.41 U	0.41 U	0.57 U	0.57 U	0.57 U	-	-	-	-	-
Field Data												
Turbidity	NTU	-	-	-	-	-	-	-	-	-	-	-
Depth To H2O, Top Casing	feet	-	-	-	-	-	-	-	-	-	-	-
Specific Conductivity (Field)	umhos/cm	-	-	-	-	-	-	-	-	-	-	-
pH (Field)	su	6.5-8.5	-	-	-	-	-	-	-	-	-	-
Oxygen, Dissolved (Field)	mg/l	-	-	-	-	-	-	-	-	-	-	-
Dry		-	-	-	-	-	-	-	-	-	-	-

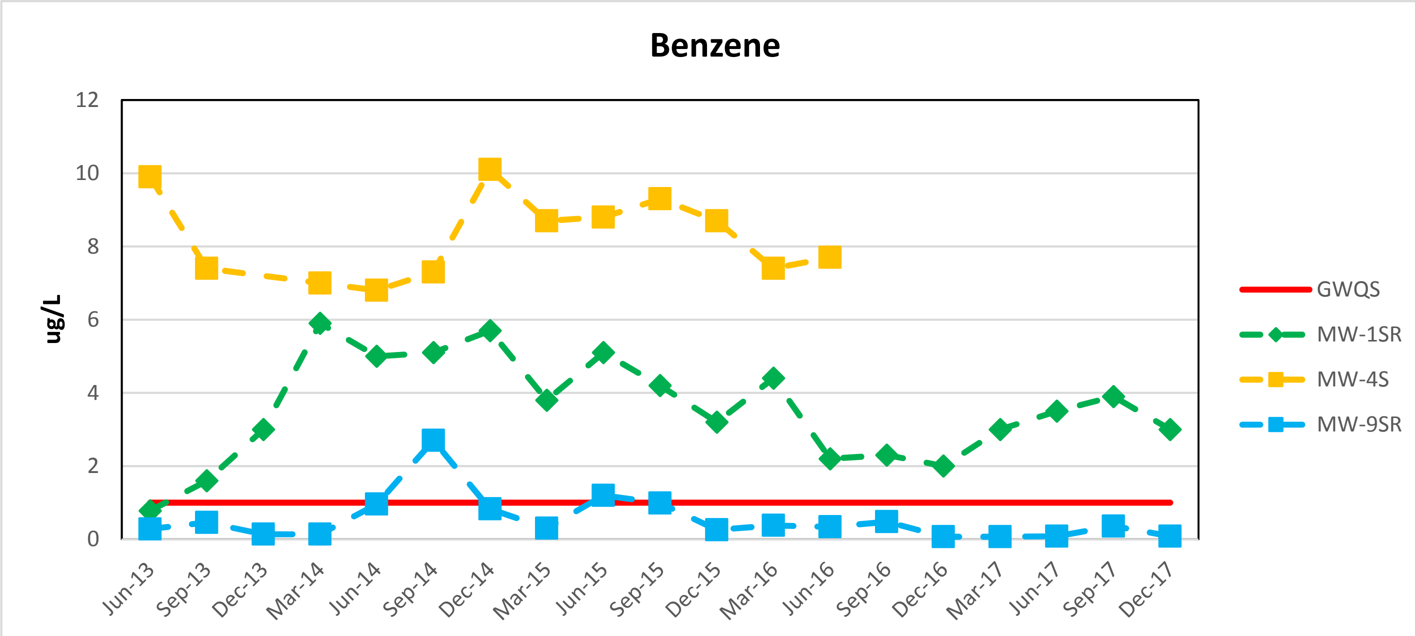
APPENDIX C

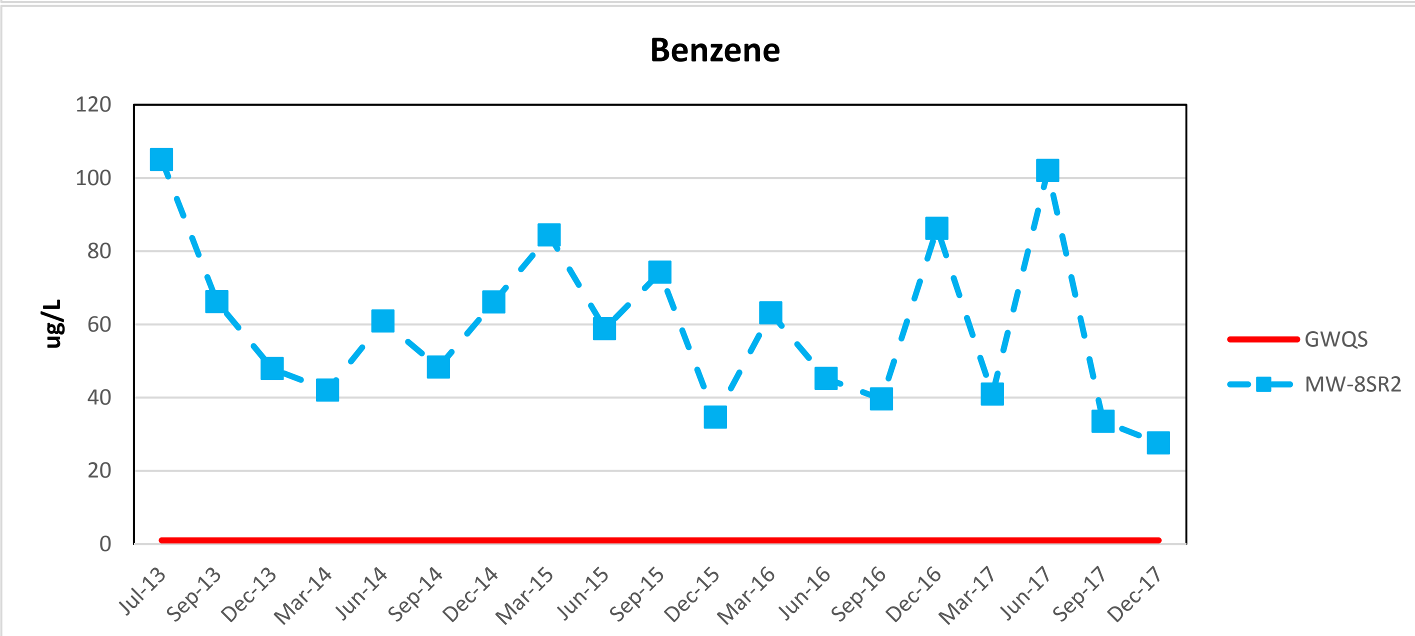
Trend Diagrams

Contaminant Trend Diagrams - 1,4-Dioxane

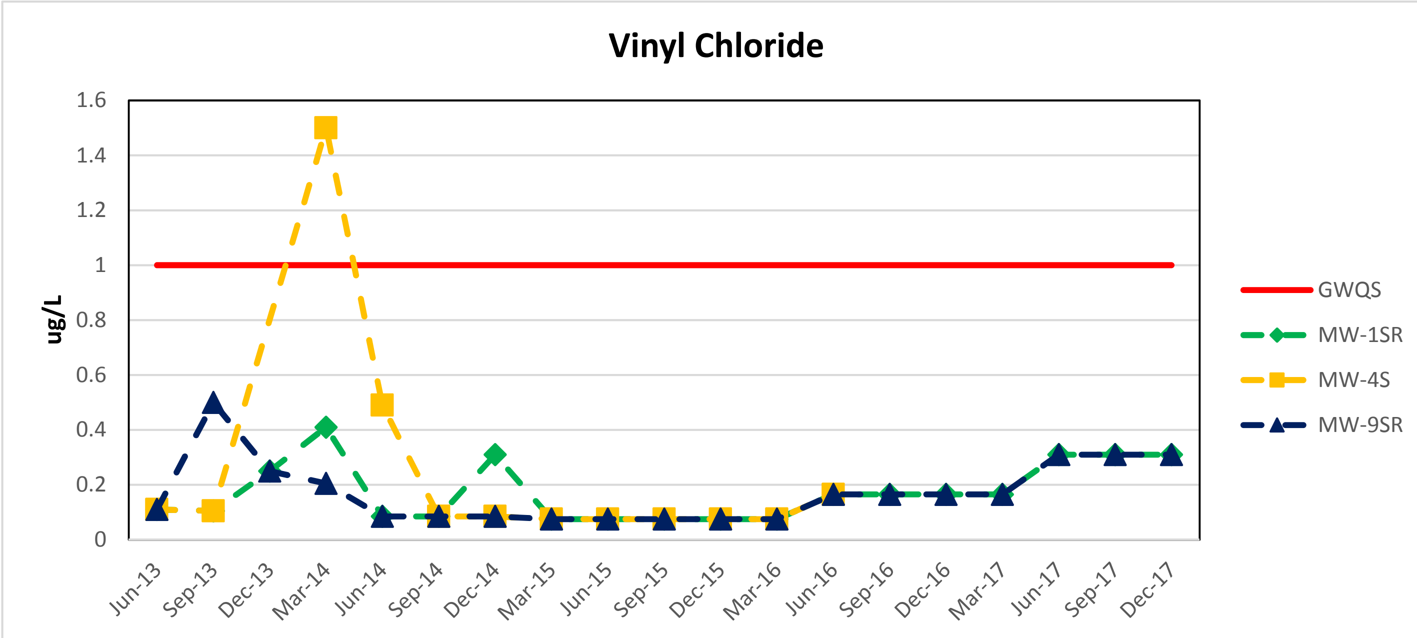


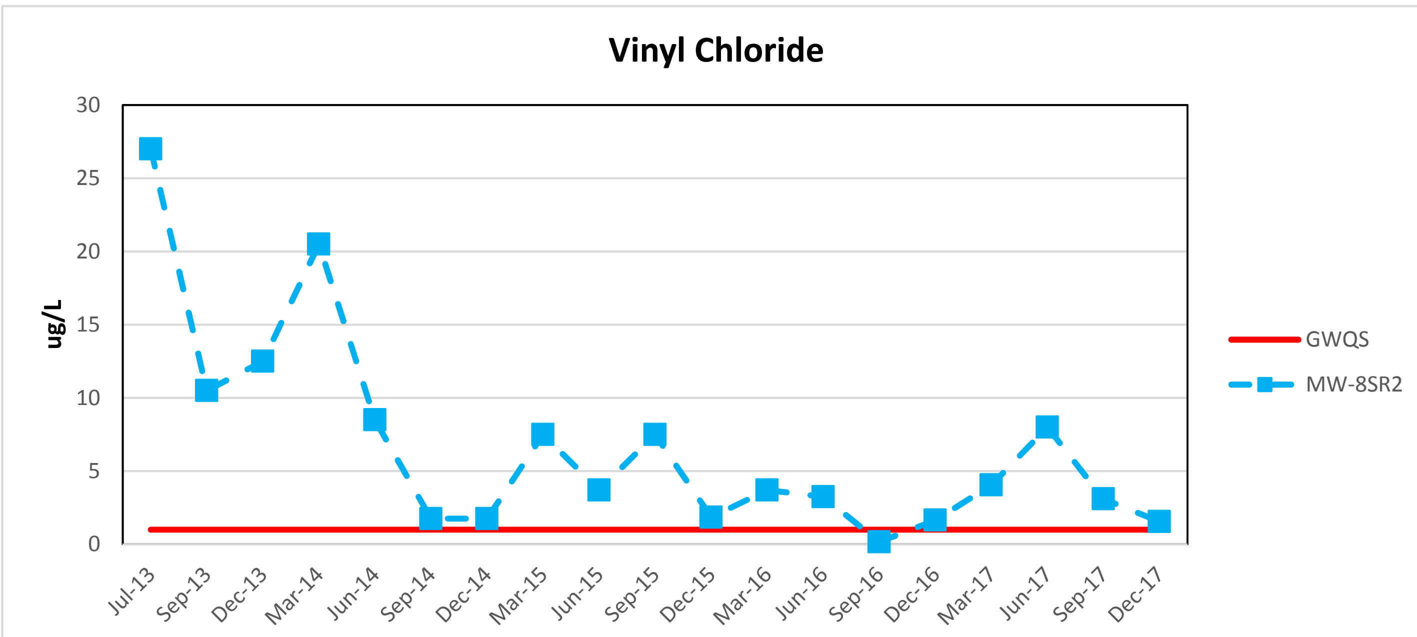



Benzene
ug/L
12
10
8
6
4
2
0
Jun-13
Sep-13
Dec-13
Mar-14
Jun-14
Sep-14
Dec-14
Mar-15
Jun-15
Sep-15
Dec-15
Mar-16
Jun-16
Sep-16
Dec-16
Mar-17
Jun-17
Sep-17
Dec-17
GWQS
MW-1SR
MW-4S
MW-9SR

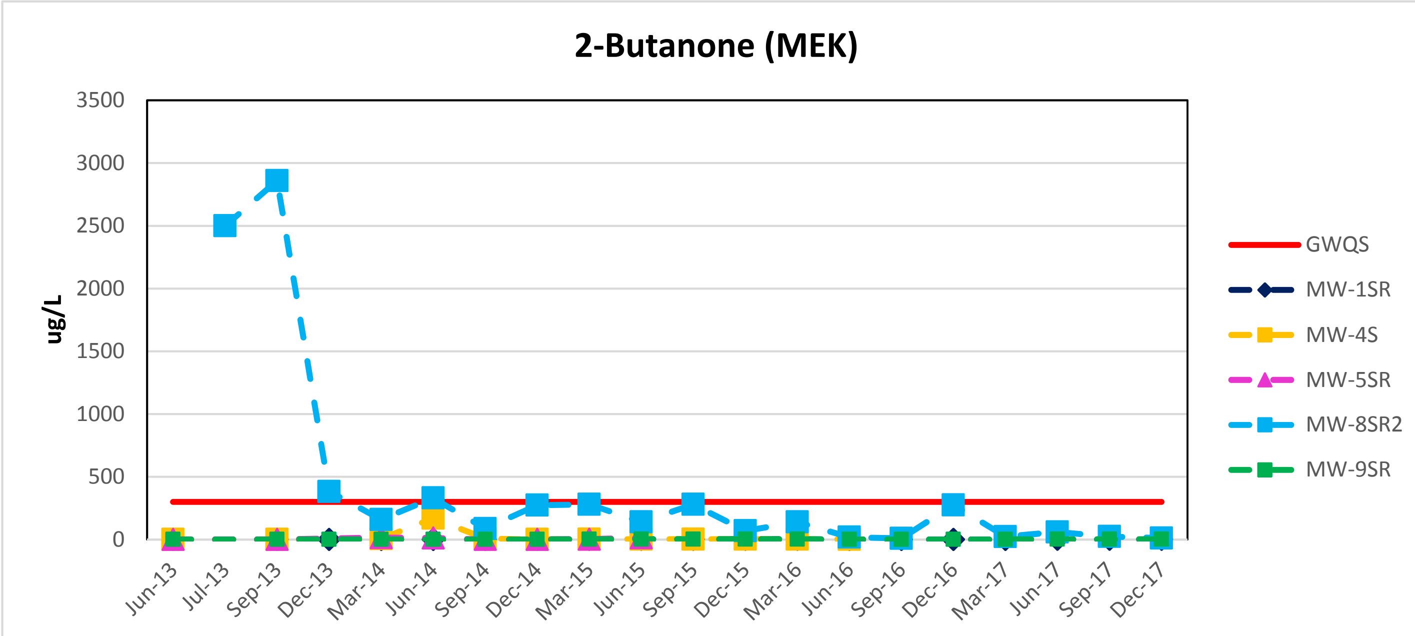

Benzene
ug/L
120
100
80
60
40
20
0
Jul-13
Sep-13
Dec-13
Mar-14
Jun-14
Sep-14
Dec-14
Mar-15
Jun-15
Sep-15
Dec-15
Mar-16
Jun-16
Sep-16
Dec-16
Mar-17
Jun-17
Sep-17
Dec-17
GWQS
MW-8SR2

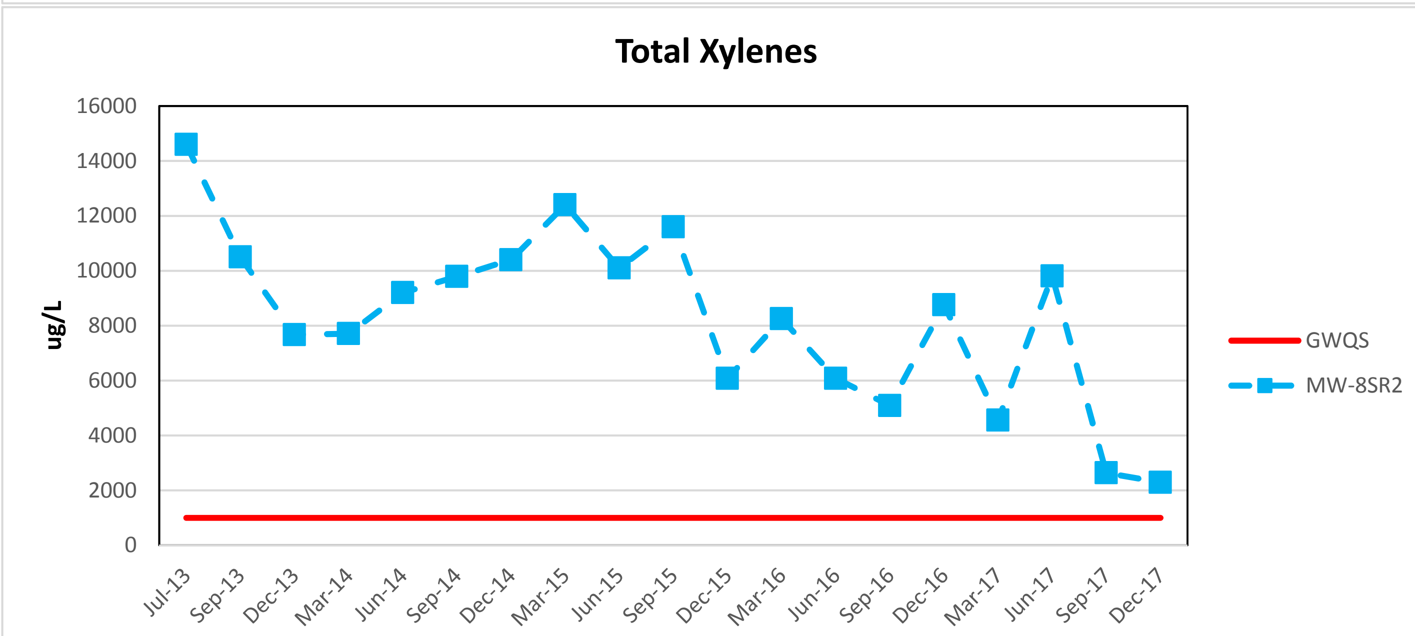
Contaminant Trend Diagrams - Volatile Organic Compounds

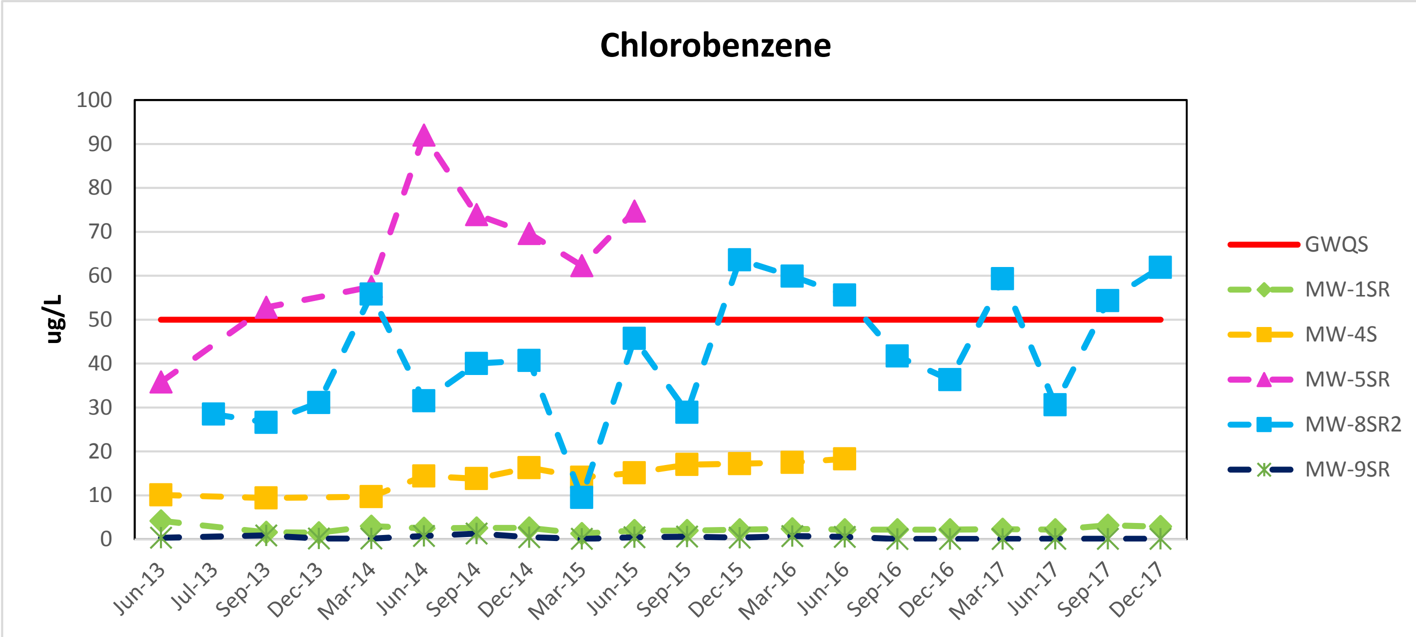


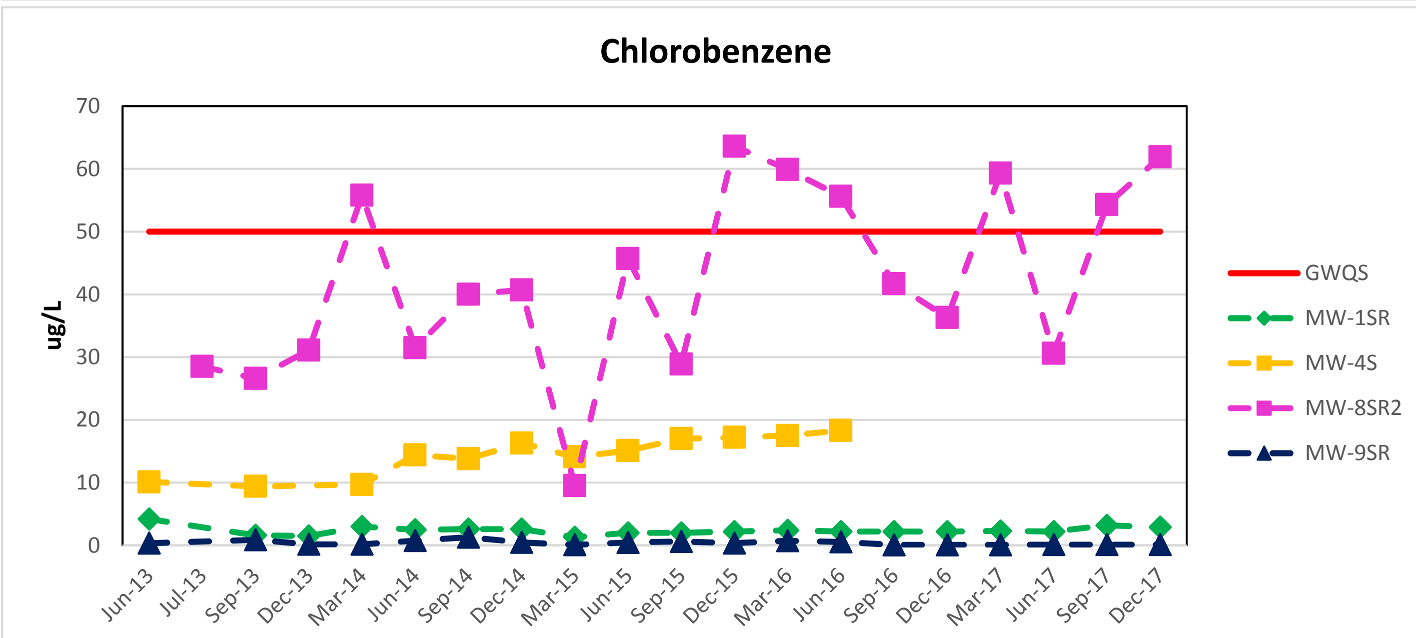


Contaminant Trend Diagrams - Volatile Organic Compounds

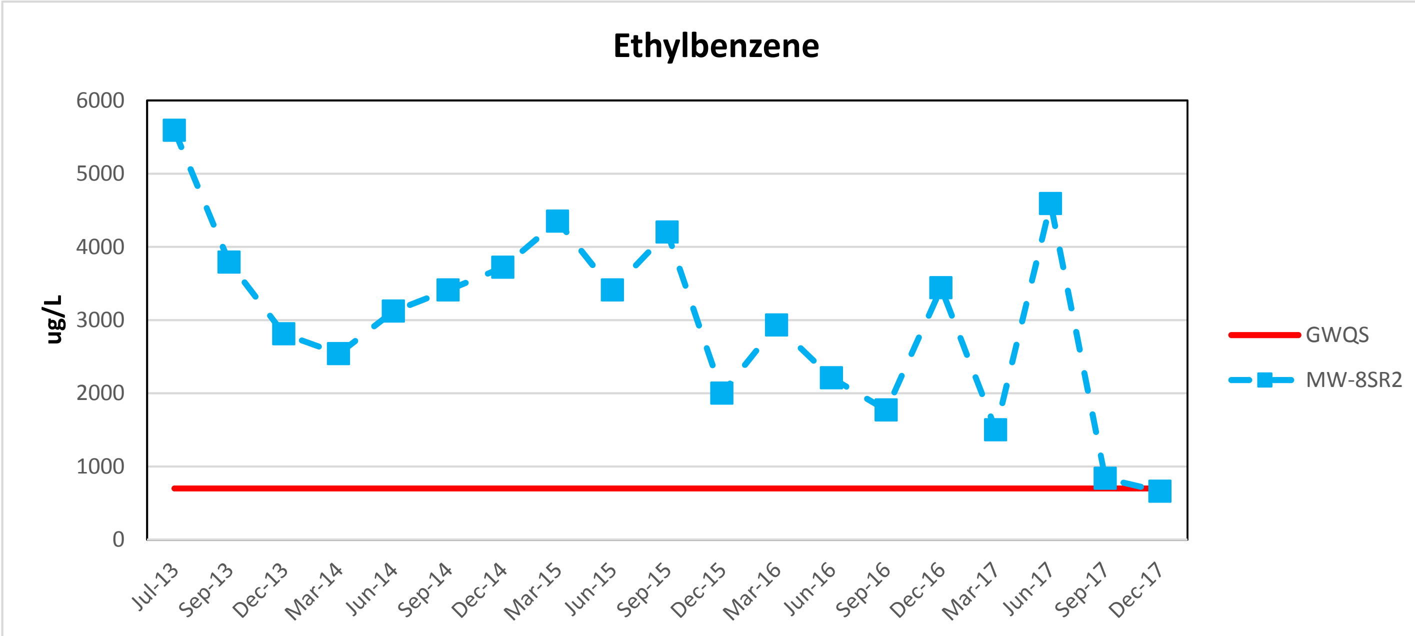


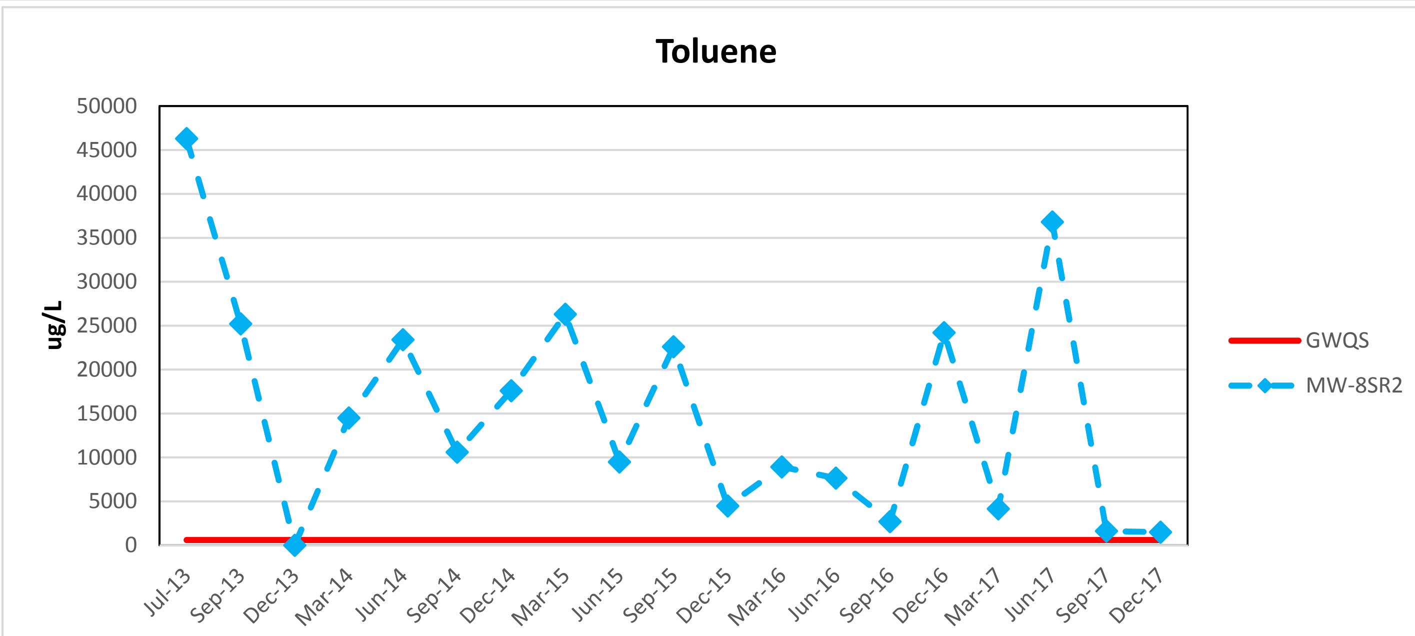



Chlorobenzene
ug/L
100
90
80
70
60
50
40
30
20
10
0
Jun-13
Jul-13
Sep-13
Dec-13
Mar-14
Jun-14
Sep-14
Dec-14
Mar-15
Jun-15
Sep-15
Dec-15
Mar-16
Jun-16
Sep-16
Dec-16
Mar-17
Jun-17
Sep-17
Dec-17
GWQS
MW-1SR
MW-4S
MW-5SR
MW-8SR2
MW-9SR

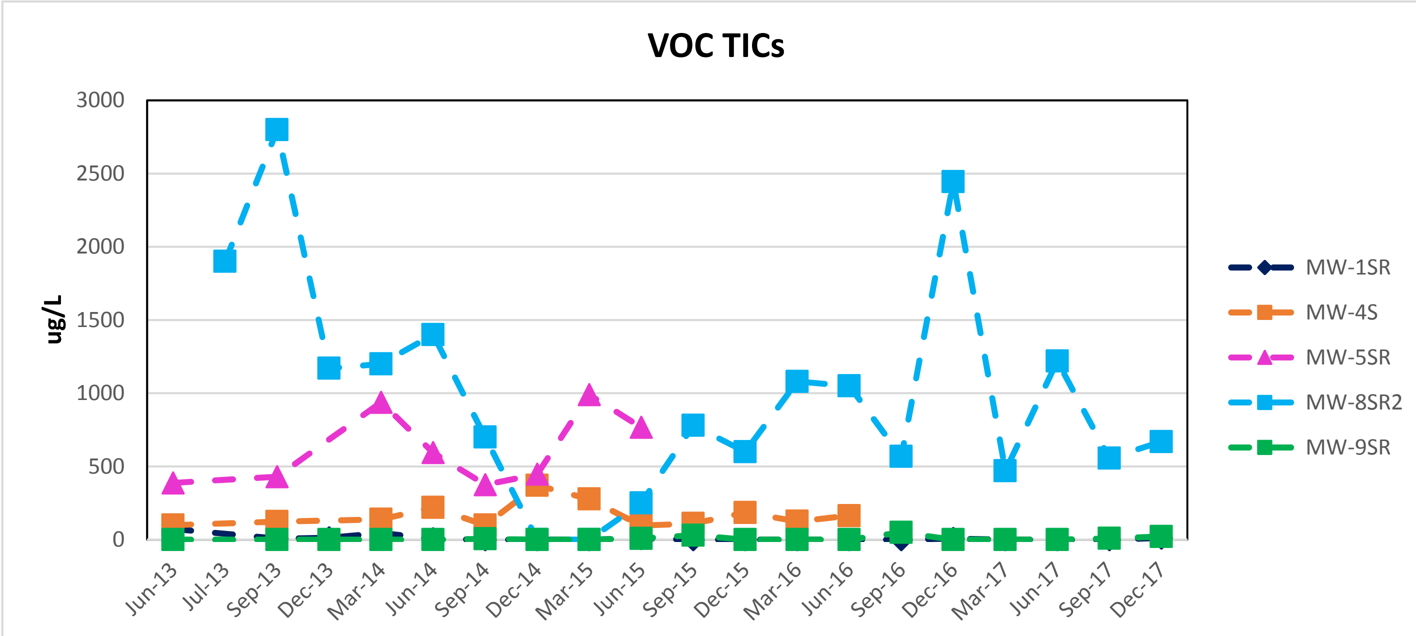

Chlorobenzene
ug/L
70
60
50
40
30
20
10
0
Jun-13
Jul-13
Sep-13
Dec-13
Mar-14
Jun-14
Sep-14
Dec-14
Mar-15
Jun-15
Sep-15
Dec-15
Mar-16
Jun-16
Sep-16
Dec-16
Mar-17
Jun-17
Sep-17
Dec-17
GWQS
MW-1SR
MW-4S
MW-8SR2
MW-9SR

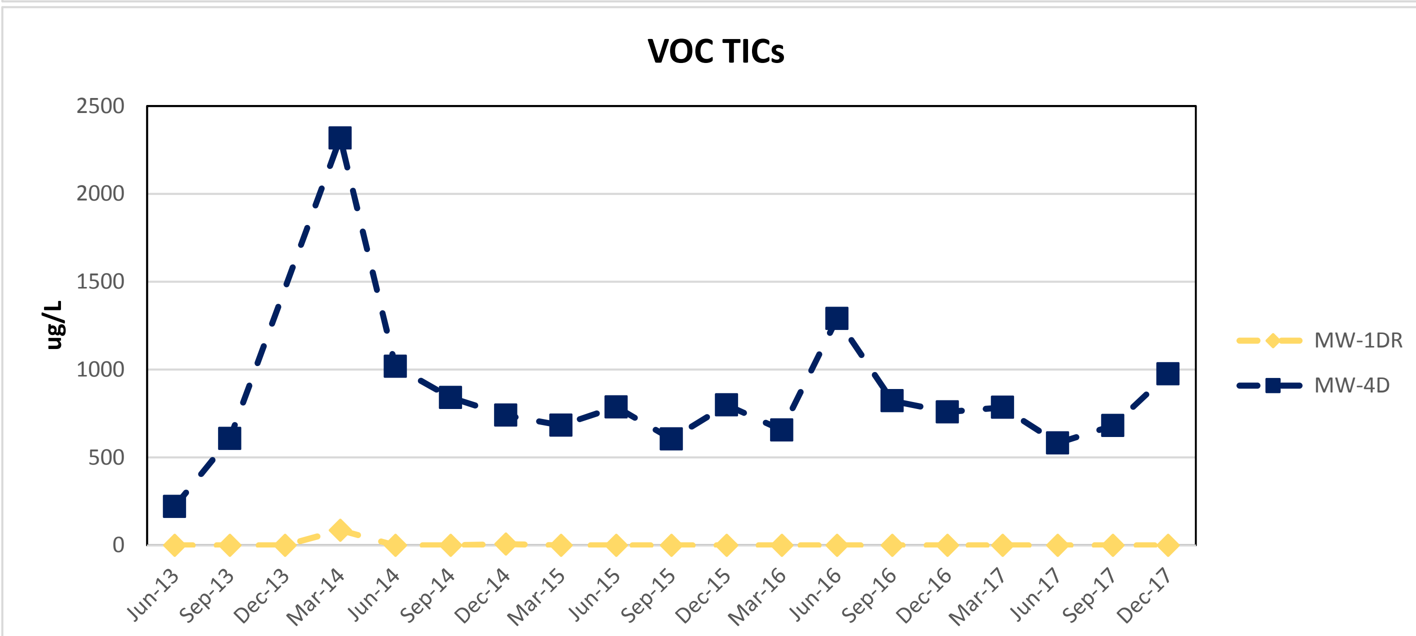
Contaminant Trend Diagrams - Volatile Organic Compounds



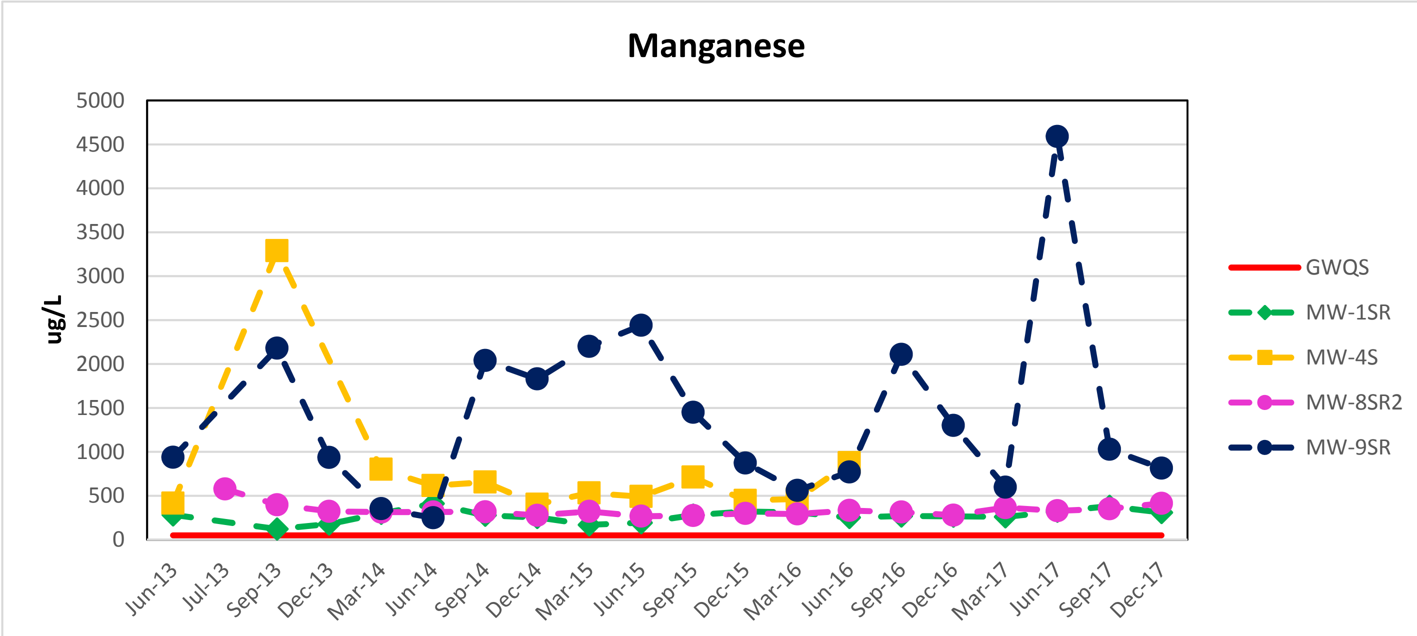


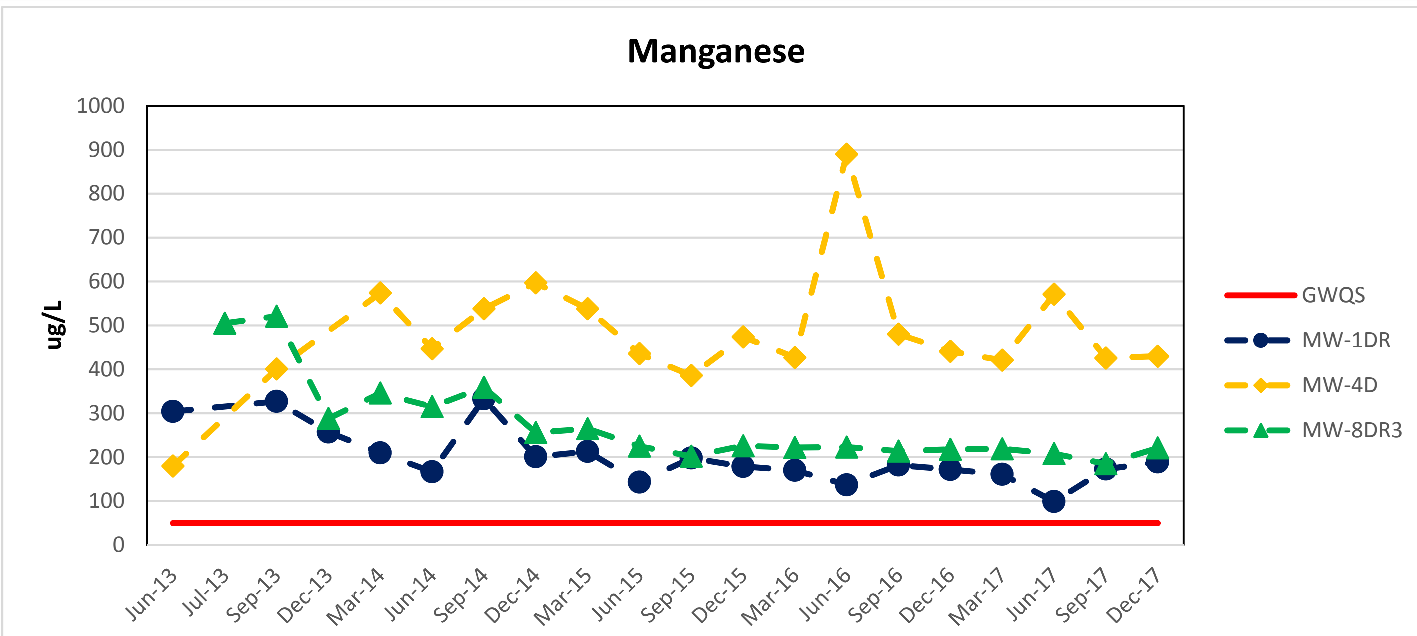
Contaminant Trend Diagrams - Volatile Organic Compounds



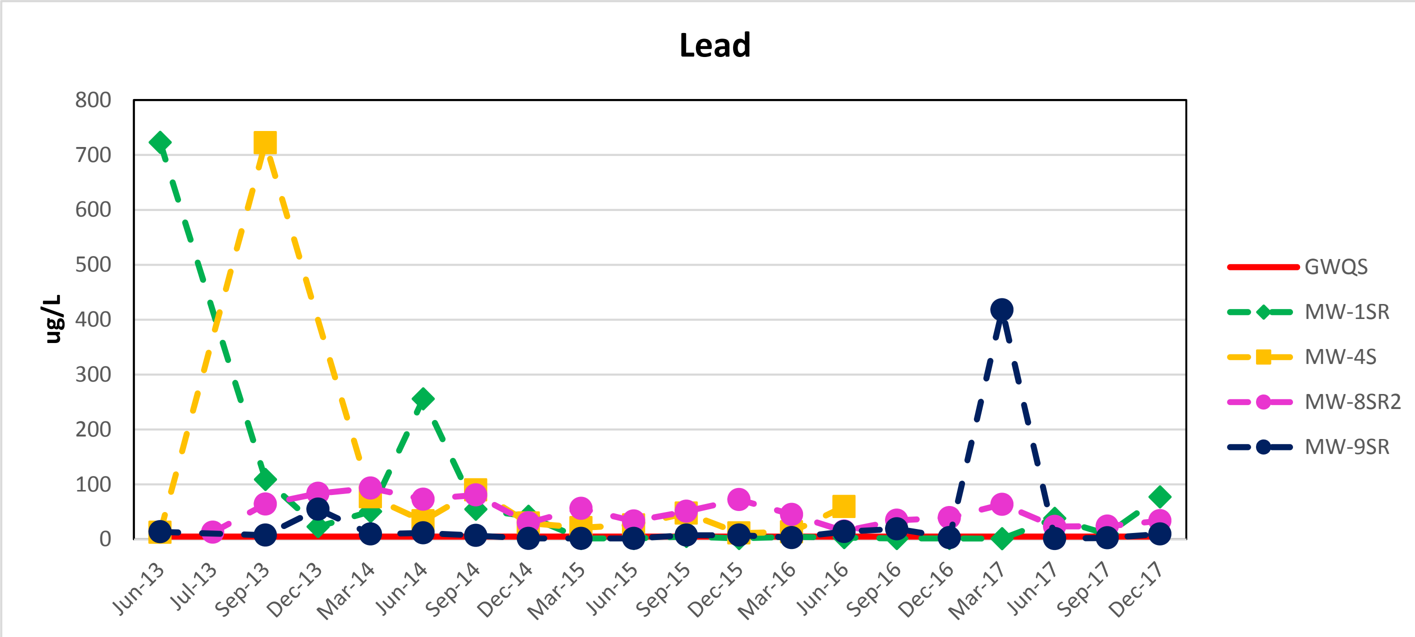


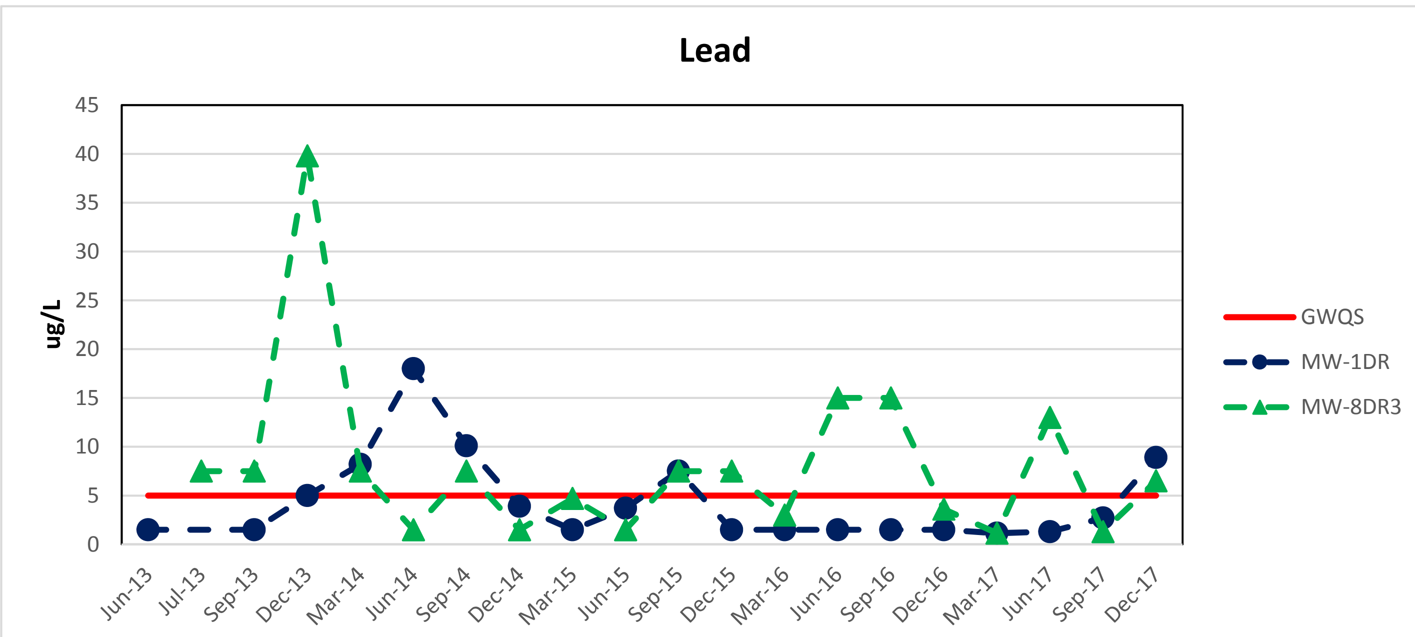
Trend Diagrams - Manganese





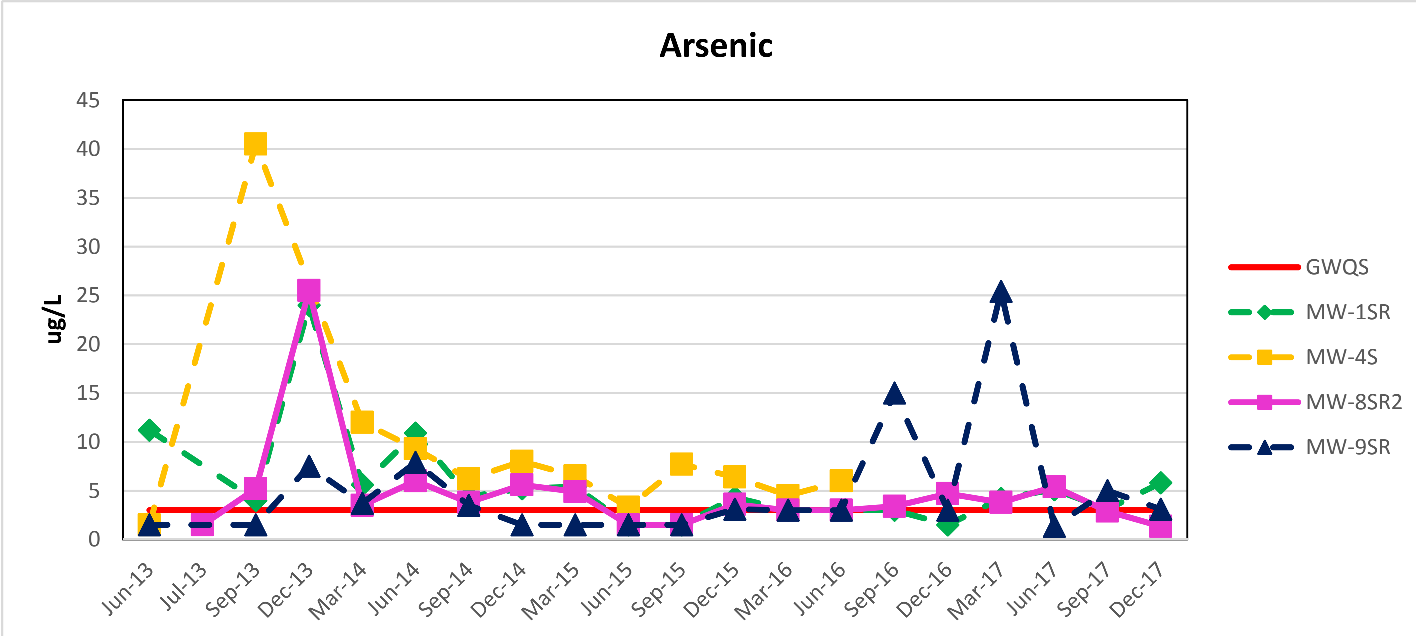
Trend Diagrams - Lead

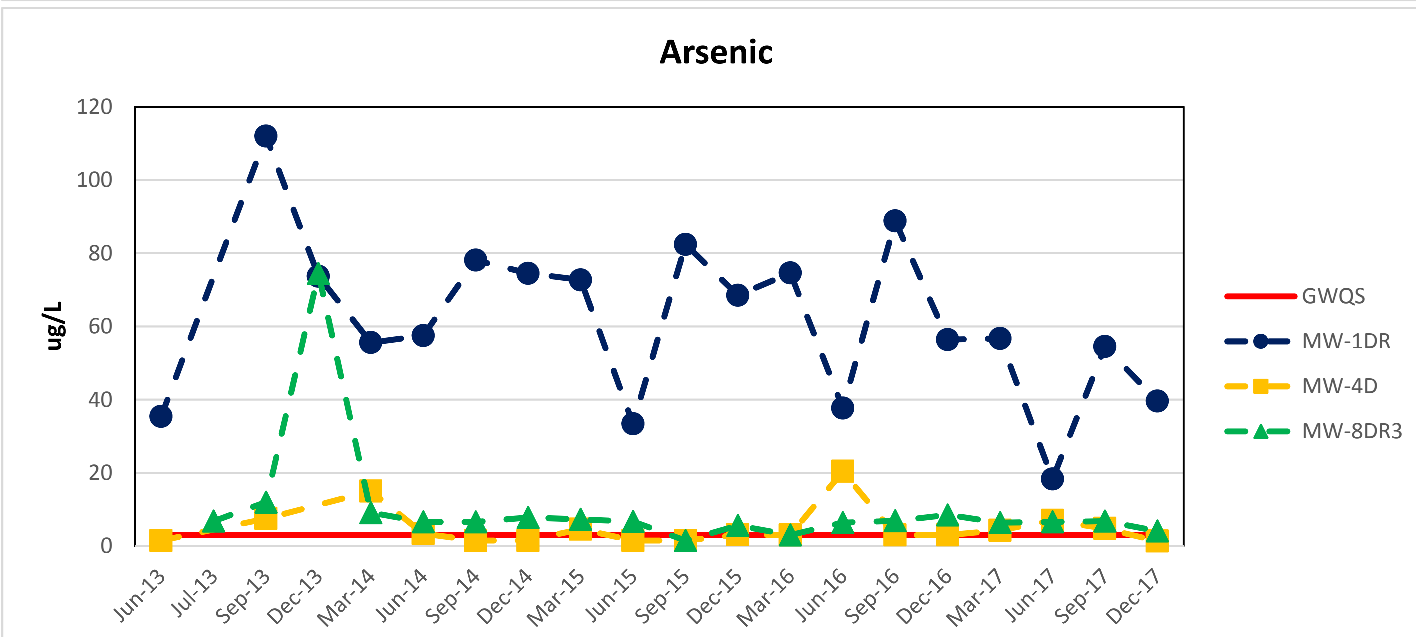




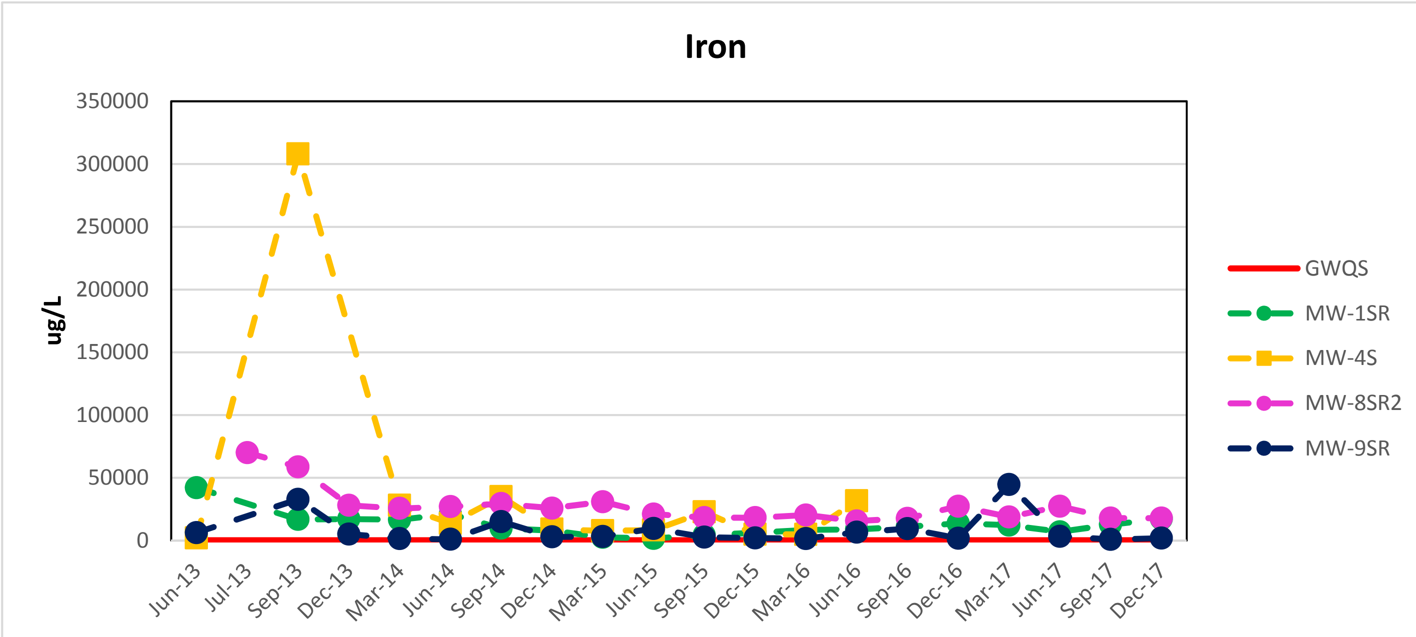
*Note that for MW-8DR3, all values for 2017 are non-detect. Detection limit for June 2017 was higher due to matrix interference

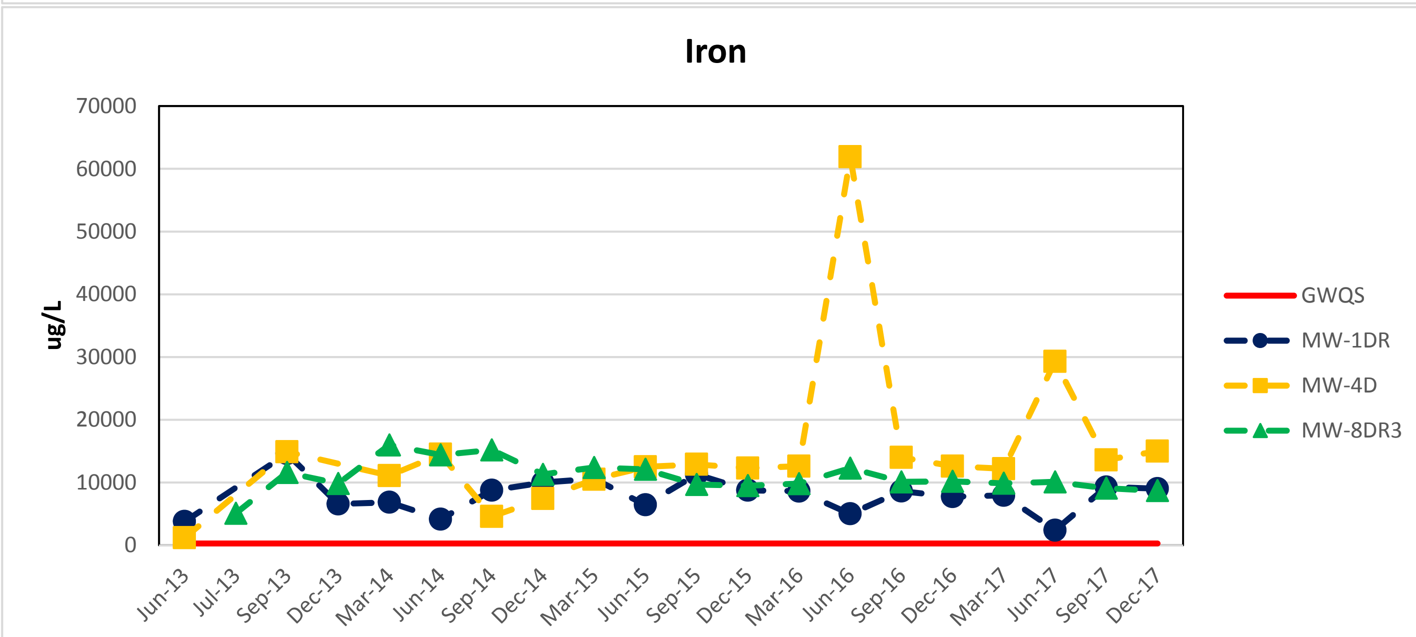
Trend Diagrams - Arsenic





Trend Diagrams - Iron





APPENDIX D

Jersey City Analytical Results for 2017

(See attached Compact Disc)

APPENDIX E

Monitoring Well Certification Form B - Location Certifications

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Prologis Ports - Jersey City Distribution Center
List all AKAs: AMB Pulaski Distribution LLC.
Street Address: 255 Route 1&9
Municipality: Jersey City (Township, Borough or City)
County: Hudson Zip Code: 07306
Program Interest (PI) Number(s): ______ Case Tracking Number(s): ______

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Prologis Inc. (aka AMB Pulaski Distribution Center LLC.)
2. Well Location (Street Address) 255 Route 1&9
3. Well Location (Municipal Block and Lot) Block# 11707 Lot # 3

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E201209018
2. Site Well Number As shown on application or plans): MW-1SR E201209018
3. Geographic Coordinate NAD 83 to nearest 1/10 of a second:

   Longitude: West 40° 43' 57.3" Latitude: North 73° 05' 01.7"

4. New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

   North 692049.7 East 607461.4

5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 20.00'
6. Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

   NAVD 88 based on actual observations taken on 01/08/2015

7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: ________ Date 1/9/15
Surveyor's Name: Marc J. Cifone License Number: GS 41329
Mailing Address 117 Hibernia Ave.
City/Town: Rockaway State NJ Zip Code: 07866
Phone Number 973-627-0029 Ext.: ________ Fax: ________

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Prologis Ports - Jersey City Distribution Center
List all AKAs: AMB Pulaski Distribution LLC.
Street Address: 255 Route 1&9
Municipality: Jersey City (Township, Borough or City)
County: Hudson Zip Code: 07306
Program Interest (PI) Number(s): ______ Case Tracking Number(s): ______

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Prologis Inc. (aka AMB Pulaski Distribution Center LLC.)
2. Well Location (Street Address) 255 Route 1&9
3. Well Location (Municpal Block and Lot) Block# 11707 Lot # 3

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E201209312
2. Site Well Number As shown on application or plans): MW-1DR E201209312
3. Geographic Coordinate NAD 83 to nearest 1/10 of a second:
   Longitude: West 40° 43' 57.4" Latitude: North 73° 05' 01.5"
4. New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:
   North 692060.1 East 607469.7
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 19.74'
6. Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)
   NAVD 88 based on actual observations taken on 01/08/2015
7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION

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SEAL

Professional Land Surveyor's Signature: 1/9/15 Date

Surveyor's Name: Marc J. Cifone License Number: GS 41329

Mailing Address 117 Hibernia Ave.

City/Town: Rockaway State NJ Zip Code: 07866

Phone Number 973-627-0029 Ext.: Fax:

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Prologis Ports - Jersey City Distribution Center

List all AKAs: AMB Pulaski Distribution LLC.

Street Address: 255 Route 1&9

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07306

Program Interest (PI) Number(s): ____ Case Tracking Number(s): ____

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Prologis Inc. (aka AMB Pulaski Distribution Center LLC.)
2. Well Location (Street Address) 255 Route 1&9
3. Well Location (Municpal Block and Lot) Block# 1639 Lot # 5C

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): 26-15307-6
2. Site Well Number As shown on application or plans): MW- 4S 26-15307-6
3. Geographic Coordinate NAD 83 to nearest 1/10 of a second:

   Longitude: West 40° 44' 10.9" Latitude: North 73° 05' 23.0"

4. New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

   North 693414.6 East 605815.0

5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 38.06'
6. Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

   NAVD 88 based on actual observations taken on 01/08/2015

7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION

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SEAL

Professional Land Surveyor's Signature: ____________________ Date 1/9/15

Surveyor's Name: Marc J. Cifone License Number: GS 41329

Mailing Address 117 Hibernia Ave.

City/Town: Rockaway State NJ Zip Code: 07866

Phone Number 973-627-0029 Ext.: Fax:

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Prologis Ports - Jersey City Distribution Center

List all AKAs: AMB Pulaski Distribution LLC.

Street Address: 255 Route 1&9

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07306

Program Interest (PI) Number(s): ______ Case Tracking Number(s): ______

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Prologis Inc. (aka AMB Pulaski Distribution Center LLC.)
2. Well Location (Street Address) 255 Route 1&9
3. Well Location (Municpal Block and Lot) Block# 1639 Lot # 5C

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): 26-15308-4
2. Site Well Number As shown on application or plans): MW-4D 26-15308-4
3. Geographic Coordinate NAD 83 to nearest 1/10 of a second:

   Longitude: West 40° 44' 11.0" Latitude: North 73° 05' 23.2"

4. New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

   North 693431.7 East 605801.5

5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 36.66'
6. Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

   NAVD 88 based on actual observations taken on 01/08/2015

7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: ______ Date 1/9/15

Surveyor's Name: Marc J. Cifone License Number: GS 41329

Mailing Address 117 Hibernia Ave.

City/Town: Rockaway State NJ Zip Code: 07866

Phone Number 973-627-0029 Ext.: ______ Fax: ______

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Prologis Ports - Jersey City Distribution Center

List all AKAs: AMB Pulaski Distribution LLC.

Street Address: 255 Route 1&9

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07306

Program Interest (PI) Number(s): ______ Case Tracking Number(s): ______

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Prologis Inc. (aka AMB Pulaski Distribution Center LLC.)
2. Well Location (Street Address) 255 Route 1&9
3. Well Location (Municpal Block and Lot) Block# 1639.1 Lot # 5C

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E201003194
2. Site Well Number As shown on application or plans): MW-5SR E201003194
3. Geographic Coordinate NAD 83 to nearest 1/10 of a second:

   Longitude: West 40° 44' 12.7" Latitude: North 73° 05' 19.3"

4. New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

   North 693602.5 East 606101.2

5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 31.31'
6. Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

   NAVD 88 based on actual observations taken on 01/08/2015

7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: ______________ Date 1/9/15

Surveyor's Name: Marc J. Cifone License Number: GS 41329

Mailing Address 117 Hibernia Ave.

City/Town: Rockaway State NJ Zip Code: 07866

Phone Number 973-627-0029 Ext.: ______ Fax: ______

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Prologis Ports - Jersey City Distribution Center

List all AKAs: AMB Pulaski Distribution LLC.

Street Address: 255 Route 1&9

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07306

Program Interest (PI) Number(s): Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Prologis Inc. (aka AMB Pulaski Distribution Center LLC.)
2. Well Location (Street Address) 255 Route 1&9
3. Well Location (Municipal Block and Lot) Block# 11707 Lot # 3

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E201307823
2. Site Well Number As shown on application or plans): MW-8SR2 E201307823
3. Geographic Coordinate NAD 83 to nearest 1/10 of a second:

   Longitude: West 40° 44' 08.1" Latitude: North 73° 05' 17.4"
4. New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

   North 693134.0 East 606250.5
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 19.44'
6. Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

   NAVD 88 based on actual observations taken on 01/08/2015
7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: _____ Date 1/9/15

Surveyor's Name: Marc J. Cifone License Number: GS 41329

Mailing Address 117 Hibernia Ave.

City/Town: Rockaway State NJ Zip Code: 07866

Phone Number 973-627-0029 Ext.: _____ Fax: _____

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Prologis Ports - Jersey City Distribution Center
List all AKAs: AMB Pulaski Distribution LLC.
Street Address: 255 Route 1&9
Municipality: Jersey City (Township, Borough or City)
County: Hudson Zip Code: 07306
Program Interest (PI) Number(s): Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Prologis Inc. (aka AMB Pulaski Distribution Center LLC.)
2. Well Location (Street Address) 255 Route 1&9
3. Well Location (Municipal Block and Lot) Block# 11707 Lot # 3

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E201308743
2. Site Well Number As shown on application or plans): ....MW-8DR3.......... E201308743
3. Geographic Coordinate NAD 83 to nearest 1/10 of a second:

   Longitude: West 40° 44' 08.2" Latitude: North 73° 05' 17.3"

4. New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

   North 693141.6 East 606252.8

5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): .... 18.77'
6. Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

   NAVD 88 based on actual observations taken on 01/08/2015

7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: ______ Date 1/9/15

Surveyor's Name: Marc J. Cifone License Number: GS 41329

Mailing Address 117 Hibernia Ave.

City/Town: Rockaway State NJ Zip Code: 07866

Phone Number 973-627-0029 Ext.: ______ Fax: ______

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Prologis Ports - Jersey City Distribution Center

List all AKAs: AMB Pulaski Distribution LLC.

Street Address: 255 Route 1&9

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07306

Program Interest (PI) Number(s): Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Prologis Inc. (aka AMB Pulaski Distribution Center LLC.)
2. Well Location (Street Address) 25 Route 1&9
3. Well Location (Municpal Block and Lot) Block# 11707 Lot # 3

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E201209313
2. Site Well Number As shown on application or plans): MW-95R E201209313
3. Geographic Coordinate NAD 83 to nearest 1/10 of a second:

   Longitude: West 40° 44' 01.0" Latitude: North 73° 04' 57.2"

4. New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

   North 692060.1 East 607469.7

5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 11.57'
6. Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

   NAVD 88 based on actual observations taken on 01/08/2015

7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: MJC Date 1/9/15

Surveyor's Name: Marc J. Cifone License Number: GS 41329

Mailing Address 117 Hibernia Ave.

City/Town: Rockaway State NJ Zip Code: 07866

Phone Number 973-627-0029 Ext.: Fax:

APPENDIX F

Laboratory Data Deliverables

(See attached compact disc)

- **Laboratory Reports**
- **Electronic Data Deliverables**

APPENDIX G

Certification

New Jersey Department of Environmental Protection
Site Remediation Program

TRADITIONAL OVERSIGHT REPORT CERTIFICATION FORM

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Prologis Ports Jersey City Distribution Center (Portion of PJP Landfill) Site

List All AKAs: Pulaski, Portion of former PJP Landfill, Former Archdiocese Property

Street Address: 400 Sip Avenue, Route 1 and 9 Southside

Municipality: Jersey City (Township Borough or City)

County: Hudson County Zip Code: 07306

Program Interest (PI) Number(s): 576808 Case Tracking Number(s):

SECTION B. REPORT INFORMATION

Report Name: ANNUAL INSPECTION + MAINTENANCE + MONITORING REPORT FOR 2017

Report Date: 03/31/2018

Federal Traditional Case Type :

☐ **RCRA GPRA 2020** ☒ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE**

☐ Other (explain):

SECTION C. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Prologis, L.P.

Representative First Name: Janet Representative Last Name Frentzel

Title: Vice President, Environmental & Engineering

Phone Number: (415) 733-9431 Ext: Fax:

Mailing Address: Pier 1, Bay 1

City/Town: San Francisco State: CA Zip Code: 94111

Email Address: JFrentzel@prologis.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: Janet K. Frentzel Date: 3/28/18

Name/Title: Janet Frentzel/Vice President

SECTION D. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: 576435

First Name: James Last Name: Mack

Phone Number: (908) 448-6566 Ext: Fax:

Mailing Address: 25 Starview Drive

City/Town: Hillsborough State: NJ Zip Code: 08844

Email Address: jamespmack@jpm-llc.com

This statement shall be signed by the LSRP who is submitting this notification in accordance with SRRA Section 16 d. and Section 30 b.2.

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☒ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: James Mack Date: 3/5/18

LSRP Name/Title: James P. Mack

Company Name: JPM-LLC

Completed forms should be sent to:

Assigned Case Manager
Bureau of Case Management
Site Remediation Program
NJ Department of Environmental Protection
401-05F
PO Box 420
Trenton, NJ 08625-0420

APPENDIX H

Field Reconnaissance of Monitoring Wells MW-4S and MW-5SR

Appendix H

Field Reconnaissance of Monitoring Wells MW-4S and MW-5SR

Monitoring wells MW-4S and MW-5SR had been consistently reported as dry by the sampling team beginning in the latter half of 2016 and continuing through all of the 2017 quarterly sampling efforts. On August 14, 2017, SAI performed a video camera inspection of the inner polyvinyl chloride (PVC) casing of these monitoring wells to determine the cause of this condition. The term dry does not necessarily mean that there was no water in the monitoring well but rather that the sampling pump could not descend into the water column most likely due to obstruction in the well. In some instances, the water level measuring instrument similarly could not descend to the water column in the monitoring well to measure the depth to water.

The video camera was attached to a weighted measuring tape and slowly lowered into each well. The video camera surveillance of MW-5SR began at approximately 11:30 AM. The video reveals what appears to be an inner deformity in the PVC (Photograph 1) near the depth of approximately 28 feet below the top of the inner casing (where the well was previously extended). Just below this deformity appears to be a possible sharp bend in the PVC casing (Photographs 2 and 3). Although the monitoring well is approximately 34 feet deep, the camera could not descend deeper than 28 feet. This depth of 28 feet is consistent with the depth beyond which the sampling pump could not descend, as reported to SAI by the groundwater sampling team from SGS Accutest (NJ Laboratory Certification #12129) of Dayton, New Jersey.

The measured depth to water from the top of the inner casing in MW-5SR was at 27.8 feet, just 0.2 feet above the deformity. This measured depth is less than historical depth to water measurements (which were taken from the top of the inner casing) in this monitoring well. Therefore, it is possible that the water detected by the instrument is condensate collected on top of the sharp bend, and not the actual water table. The water level measurement instrument could not descend beyond 28 feet, where the bend occurs.

The video camera surveillance on MW-4S began at approximately 12:10 PM. A partial blockage or partially collapsed PVC section was observed at 24 feet below the top of casing, as depicted by the still image (Photograph 4). This depth is consistent with the depth at which the SGS Accutest sampling team reported a blockage in the sampling pump during the summer sampling event. The still image shows that there is an opening in the center of the partial blockage. Consequently, the water level instrument could be lowered to the bottom of the well, which was encountered at a depth of 45.5 feet below the top of the inner casing. The depth to groundwater was measured at 32.5 feet below the top of the inner casing, which is consistent with recent measured depths to groundwater in this monitoring well.

Based upon the video camera surveillance, it appears that MW-5SR is bent at a depth of 28 feet below the top of the inner casing. MW-4S has a possible PVC blockage at 24 feet below the top of the inner casing. Because of the damage to both wells, a pump for the collection of samples cannot be lowered into the water column in the well. Although previously reported as dry by the sampling teams, MW-4S has more than 10 feet of groundwater as measured when lowering the water level instrument through the opening in the center of the partial blockage. Depth to water in this well was measured at 32.5 feet below the top of casing, approximately eight feet below the partial blockage. In MW-5SR, the water measured in the well may represent condensate. Nevertheless, neither monitoring well can be used to properly sample groundwater at this time.

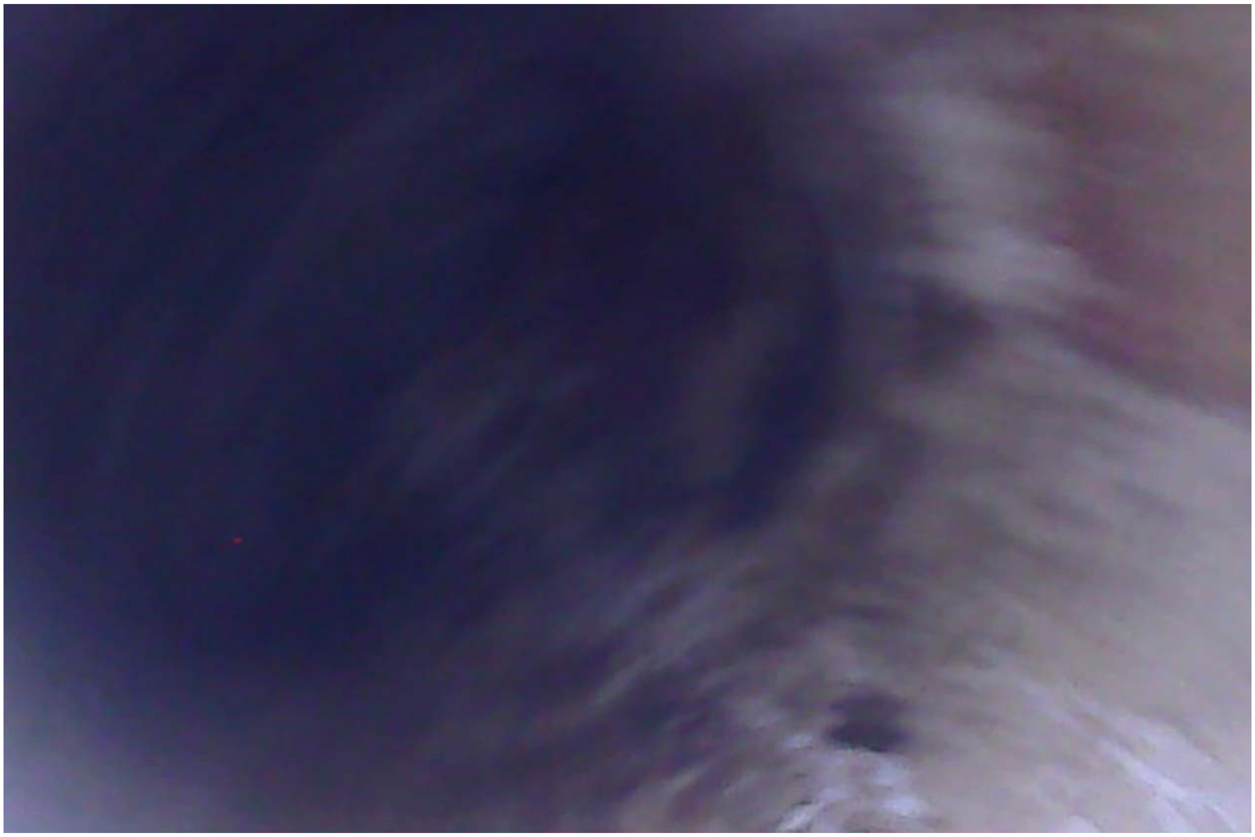
Prologis, L.P. will retain a licensed well driller in 2018 to review the video footage to ascertain whether it is feasible to repair any of the wells, or if one or more need to be properly abandoned and replaced. If either or both of the monitoring wells need to be abandoned, the replacement monitoring well(s) will be located as close as possible to the existing well(s) to preserve sampling consistency to the extent possible.

Photograph Log

Photo 1 – MW-5SR PVC Deformity

Photograph 2 – MW-5SR Possible PVC Bend

Photograph 3 – MW-5SR Possible PVC Bend



Photograph 4 – MW-4S PVC Blockage

Sadat Associates, Inc.
Engineering and Environmental Science
1545 Lamberton Road • P.O. Box 4129
Trenton, NJ 08610 • 609-826-9600